TEACHER SPECIALIST ON SITE
Second Year Formative Review
2002-2003

Report
to the
South Carolina Education Oversight Committee
From
The Education Policy Center at the University of South Carolina
And
The Division of Accountability

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Executive Summary

The Education Oversight Committee (EOC) is charged with reviewing and monitoring the implementation and evaluation of the Education Accountability Act (EAA) and Education Improvement Act (EIA) programs and funding. The EOC requested an evaluation of the Teacher Specialist on Site (TSOS) program and approved a three-year evaluation model, with annual formative reports. For purposes of this evaluation, the focus was limited to 2001-2002, 2002-2003, and 2003-2004 school years. The First Year Formative Review was published in December 2002 and was posted on the EOC website (www.sceoc.org).

The EOC staff worked with representatives of the SC State Department of Education (SDE) to establish the following principal research question:

Does student achievement improve in schools assigned teacher specialists?

Five related questions also were identified:

- How has student achievement improved over time in schools assigned teacher specialists?
- Are there changes in the school community and/or culture during the years with teacher specialists?
- How has the teacher specialist program impacted upon the instructional skills and professional growth of the teachers involved?
- How has the program functioned over time?
- What are the unintended consequences of the teacher specialist program?

Part II – Executive Summary of Perceptions of Teachers, Teacher Specialists and Principals toward the Teacher Specialist on Site Program

The largest technical assistance program currently serving unsatisfactory or below average schools in South Carolina is the Teacher Specialist On-Site (TSOS) Program. In 2002-2003 the program provided 84 schools with 202 master teachers to work with classroom teachers in improving instruction. The South Carolina Educational Policy Center (SCEPC) in the College of Education at the University of South Carolina was asked to assist the Education Oversight Committee (EOC) in their review of the 2002-2003 TSOS program. In collaboration with EOC staff and staff from the Office of School Quality at the South Carolina Department of Education, questionnaires were developed to assess the implementation and effectiveness of the TSOS program. Questionnaires were sent to principals, teacher specialists, and teachers in all 84 schools where teacher specialists were assigned. The questionnaire return rate was about 95% for the selected schools and for the groups of principals, teacher specialists, and teachers.

Of the 84 schools, 46 schools were in their first year of program participation, 22 in their second year, 7 in their third year, and 9 in their fourth year. The number of teacher specialists per school ranged from one to eight with an average of 2.4. Teacher specialists reported that they served an average of about six teachers. Teachers who worked with the specialists typically had a continuing contract (74%), although 26% of the teachers held annual, induction, or provisional contracts. Eighty-two percent of the teachers had a professional teaching certificate,

8% had critical needs/PACE certification, and the remaining 10% had initial, temporary, or special subject certificates. In some schools, all or a majority of teachers were veterans with the highest levels of certification or licensure. In other schools, the majority of teachers had been in the profession less than 2 years or held other types of certificates or licenses. Similarly, while some schools had veteran principals, one third of the principals were in their first or second year of the principalship and 59% had served in their current school for 2 years or less.

SCEPC's analysis of the questionnaire data found that:

- Eighty-six percent of the principals, 94% of the specialists, and 79% of the teachers assigned either an "A" or a "B" to the TSOS program. When asked to describe why they assigned the grade they did, principals and specialists most frequently stated that the program improved teacher effectiveness, teacher skills, instruction, alignment of curriculum, student achievement, and similar types of statements. Teachers said that the TSOS were encouraging, supportive, or helpful to them and inspired teamwork and collaboration.

- About 80% of the teachers and 90% of the principals and specialists agreed that the climate for implementation of the program was positive.

- Although many principals and teachers were new to their current school or new to the profession, about one-third of the principals and more than three-fourths of the teachers reported receiving less than one hour of training/orientation to the TSOS program prior to the first day of school in 2002-2003.

- About 8 in 10 teachers and 9 in 10 principals and specialists agreed that the climate for implementation of the program was positive.

- Nearly all principals and about 90% of the teachers agreed that the specialists had the content knowledge to be effective, had modeled instruction well, had responded promptly to requests for assistance, and had helped the faculty incorporate curriculum standards.

- In response to the item, "I support the teacher specialist program," 92% of principals agreed. The comparable figures for teacher specialists and teachers were 99% and 84%, respectively.

- Ninety-four percent of the principals agreed that they had been actively involved in program implementation, but fewer - 75% - said that they had a sense of ownership in the program. For teachers, only 57% agreed that they had a "sense of ownership," 19% were not sure, and 24% disagreed.

- Ninety-four percent of principals and 89% of the teachers agreed, "You can count on the teacher specialist to be at school, on the job, helping the school improve." Almost three-fourths of the teachers and more than four in five principals said that the program should continue to be funded, perhaps reflecting ambivalence about budget priorities.
- Eighty-nine percent of the principals, 93% of the specialists, and 74% of the teacher

responded favorably to the item: "The teacher specialist program has contributed greatly to the effectiveness of instruction at this school."

- Eighty-four percent of the principals and 83% of the teachers planned to continue working at their current schools next year.

- Activities by the TSOS in the areas of demonstrating or modeling lessons, helping align instruction to the state standards, and sharing new strategies for instruction were noted by principals and teachers as most helpful to them.

- Although the TSOS received strong support from three-fourths of the teachers, the program was not without its detractors. Of the more than 800 teachers included in the study, about 18% were identified as "nay sayers." Nay sayers assigned grades of "C," "D," or "F" to the program and also disagreed with the proposition that the TSOS program "has contributed greatly to the effectiveness of the instructional program at the school." This group felt little program ownership, had little confidence that the program was improving their teaching or meeting their needs, and saw little prospect of going to the specialist for advice regarding classroom or personal problems. In contrast, the "supportive teachers," those assigning grades of "A," or "B" to the program and also agreeing with the proposition that the program had contributed greatly to the effectiveness of the instructional program at the school (two-thirds of the total), indicated greater trust in the teacher specialist, more confidence in the specialist's ability to improve the skills of the teacher, and greater ownership in the program.

SCEPC Recommendations for Program Improvement

Program Models and Evaluation: In developing a description of the TSOS program, we found that the program took many forms in the 84 schools using teacher specialists. In addition to varying numbers of specialists, other assistance providers such as principal specialists or leaders, curriculum specialists, or curriculum instructional facilitators were also working in many of the schools. Ten distinct models of assistance were identified among the 84 schools studied. This type of variation in models related to the implementation of the TSOS program makes it very difficult to attribute any outcomes (such as increased student achievement) directly to the presence of the teacher specialists. A discrete number of potential program implementation models should be developed and schools be allowed to select the model that they believe will most effectively address their needs as outlined in their revised school improvement plan. The models should be developed within the context of a comprehensive, ongoing evaluation design and be small enough in number to ensure evaluability. An annual review of program effectiveness should be conducted that addresses both overall program performance and the performance of the various implementation models.

Identification of Schools to Be Served by the TSOS: The identification of schools to be served by teacher specialists should take into account longitudinal school performance and the needs of the teachers and administrators. School performance data for both absolute and improvement ratings should be examined over a 3-year period to establish priorities for the provision of services. Once schools are identified, assistance services should be provided for 3 years. Districts and schools should also sign contracts assuring support and agreeing to follow the guidelines for the TSOS program. In addition, the specific types and numbers of assistance

providers should be determined based on a detailed analysis of the experience of the school administration and faculty as well as other factors. There was considerable variation among the 84 schools in teacher experience, teacher certification, teacher contract status, and principal experience. Diagnosis of individual school staff needs will ensure that appropriate services are provided.

Staff Development Training: Prior to implementation of the TSOS program, every teacher and administrator in the selected schools as well as the district superintendent or designee should attend training to receive oral and written descriptions of approved and non-approved teacher specialist roles and responsibilities. Areas of potential confusion, such as teacher specialists conducting student tutoring or writing school improvement plans, should be clarified prior to the beginning of the school year. Districts or schools that choose not to participate in training should not be assigned teacher specialists. The principal, specialists, and any other assistance providers should work as a team to develop a unified plan for raising student achievement and make certain that all curricula, professional development, and other assistance services are focused on major school goals. This plan should be based on an assessment of school climate and an analysis of the professional development needs of the school staff in relation to the school improvement plan for raising student achievement. Principals and the district superintendent should participate to the greatest extent possible in training opportunities provided to the specialists in order to build the capacity of the district and the principal as instructional leaders. Teacher specialists should be provided with professional development on the coaching and mentoring of adult learners and trained to deal with teachers who may not welcome their attentions. Ongoing opportunities for the specialists to interact with other specialists in person or through electronic means should be enhanced.

Part III: Executive Summary of the Academic Achievement Review

The second component of the evaluation explored the question, has the program contributed to school-wide academic performance and can that performance be sustained over time?

Of the schools eligible for teacher specialists in 2001-2002, student performance on statewide assessments resulted in the following:

Grades 3-8 English language arts performance

- Only three elementary or middle schools in any tier reduced the percentage of students scoring below basic by five percent or greater;
- Two elementary schools in the "other" category reduced the percentage of students scoring below basic by five percent or greater;
- Six of 33 Tier Two schools increased the percentage of students scoring proficient or above although only three schools of the 57 did so by five percent or greater;
- Two primary and two elementary schools met the threshold for Adequate Yearly Progress as defined under *No Child Left Behind* federal requirements.

Grades 3-8 Mathematics performance

- 31 of 57 schools reduced the percentage of students scoring below basic by five percent or greater; tier assignment did not reflect differences in impact;
- 22 of 57 schools increased the percentage of students scoring proficient or above although only four schools did so by five percent or greater;

- Two primary and three elementary schools met the threshold for Adequate Yearly Progress as defined under *No Child Left Behind* federal requirements.

Exit Examination performance

- With respect to passing all subtests, three schools improved the percentage of students by at least 5 percent, while four schools lost ground by that amount;
- Performance on the reading subtests demonstrates three schools improving by five percent, and three regressing;
- Performance on the math subtest was most positive; five of nine high schools improved and only one lost ground;
- Performance on the writing subtest was most disappointing; five schools lost ground while only one improved by 5 percent.

Schools also received ratings for absolute and improvement performance in accordance with the state's annual school and district report card system:

- Approximately one-fourth (13 of 57) of the schools receiving services earned improvement ratings of average or above;
- 15 of 57 schools elevated their absolute ratings; eight moved from Unsatisfactory to Below Average; six moved from Below Average to Average; one moved from Average to Good;
- Elementary schools were most likely to elevate absolute and improvement ratings;
- Three middle schools elevated absolute between 2001 and 2003;
- Ten of the 57 schools elevated their improvement ratings between 2001 and 2003;
- Tier assignment did not impact consistently upon movement within ratings categories.

The schools eligible for technical assistance exhibit considerable turnover among teaching and administrative personnel. The TSOS program faces tremendous challenges in school environments with teacher turnover rates between 20 and 50 percent and average administrative tenure only slightly more than two years.

Neither the First nor Second Year Formative review is intended to provide summative judgments about the program. This Review provides information for program development and refinement. Ten issues were offered for reflection in the First Year Formative Review. During the 2002-2003 year the State Department of Education addressed a number of these issues and took the following actions:

1. Would a thorough and systematic definition of the treatment model(s), overall goal and annual objectives generate more uniform progress and minimize the impact of local turnover and variations of technical assistance personnel assignments?

   The SDE adheres to the leadership team model as described in this report. [NOTE: Effective with the 2003-2004 academic year, the SDE has modified its processes for tier designations and structured technical assistance within seven priorities among the three tiers.]

2. Do all external review team reports recommend teacher specialists or are there settings in which a different technical assistance strategy is recommended and/or appropriate?

Does the external review team fully understand the available options and when each is appropriate?

The external review team process has been clarified so that reports and recommendations now provide opportunities for team members to comment on the school in a narrative form and to indicate the priority for assignment of teacher specialists.

Through a proviso in the General Appropriations Act, the SDE is to assign teacher specialists at the rate of an average of five per school and may assign teacher specialists to teachers working with students with disabilities or with students with limited English proficiency.

3. Can the building blocks for sustainable change be identified and annual as well as long-range expectations made clear to school communities and technical assistance teams so that immediate and interim progress can be recognized?

   Although the SDE and EOC staff members have worked on this issue, a consensus model has not been achieved. There is agreement on a number of principles including multi-year improvement efforts, the need for local board and administrator training, flexibility in the use of certain funds and the need for a district guiding administrator to coordinate efforts across schools and within the provisions of *No Child Left Behind*. Eight recommendations to strengthen the technical assistance program were agreed to by the SDE and EOC staff members and adopted by the EOC at its December 2003 meeting. These recommendations are forwarded to the leadership of the General Assembly.

4. How should the high school model differ from the elementary and middle school model?

   The high school model differs in that teacher specialists are assigned by content area, instead of grade level. At the middle school, teacher specialists also are assigned by content area. A review of external review team materials indicates that the teams are not given the option of assigning teacher specialists in social studies.

5. Can the lines of authority and cooperation among the SDE, local district and school administrations and teacher specialists be clarified to support program implementation and sustain improvement?

   The SCEPC survey data indicate that this has been improved, particularly with respect to program administration; however, the relationship of the program with other state and local initiatives offers substantial opportunity for confusion. The data suggest that local orientation to and understanding of the program is critical to support.

6. How can local district and school administrative support and ownership of the teacher specialist role be enhanced?

   The SDE has enhanced the training model to address these concerns.

7. What is the level of annual improvement expected or the level of improvement expected

across three years?

This has not been specified although the SDE has completed background work to establish expectations and the designation of an expected improvement rating is among the recommendations on the technical assistance program adopted by the EOC in December 2003.

8. How can the positive relationships among teachers and teacher specialists be sustained and focused more intently upon student achievement?

   The SDE has increased opportunities for principals and teachers to receive an orientation to the program.

9. What are local factors associated with higher levels of student performance among schools in the teacher specialist program?

   The SDE relies upon the recommendations of the external review team to assign priorities for the assignment of teacher specialists. Other data in the two formative reviews suggest that administrator and teacher readiness and understanding of the teacher specialist program are critical. In those settings in which the school personnel have been trained there is a higher level of program acceptance. Stability in school assignment for both administrators and teachers is necessary for professional development to move beyond the novice level.

10. What are the financial and instructional costs to schools and districts sending teachers to serve as teacher specialists in underperforming schools?

    Although this remains an issue, mid-year budget reductions resulting (in many districts) in larger pupil-teacher ratios have ameliorated this issue---for the short term.

A number of formative issues remain and/or have arisen through the second year review. These issues are the following:

1. How can the program models be clarified so that expectations, roles, responsibilities and authority are clear? The current variations of the teacher specialist program confound internal coherence and consistency; preclude attribution of results and ultimately challenge efforts to replicate the services.

2. Can the protocols used by the external review team be defined so that priority assignments are linked to data and transparent to those administering, participating in and evaluating the program?

3. What is the most successful model to effect change in high school performance and /or should priorities be placed on ninth and tenth grade instruction? How is the dilemma of low graduation rates affected by the teacher specialist model?

4. Can program administration and authority be defined within the variations using teacher specialists and across school, district and state improvement strategies?

5. Can the teacher specialist program assist in developing local capacity beyond the period of state support?

6. Can the teacher specialist coaching role be separated from the allocation of supplementary instructional materials or services; student extended learning time and other expectations?

7. What is the responsibility of the teacher specialist for student and school achievement?

8. How is this represented in the evaluation of individuals serving as teacher specialists?

PART I

Introduction

The Education Oversight Committee (EOC) is charged with several duties including, "review and monitor the implementation and evaluation of the Education Accountability Act and Education Improvement Act programs and funding."[1] Working through the EOC Subcommittee on the Education Improvement Act and Improvement Mechanisms, the EOC asked its staff to conduct an evaluation of the Teacher Specialist on Site (TSOS) program. The EOC approved a three-year evaluation model, with annual formative reports. Formative data collections were scheduled for the academic years of 2001-2002, 2002-2003, and 2003-2004, with a full evaluation report published in winter 2005. Teacher specialists employed as a strategy at schools under the authority of the Education Improvement Act of 1984 impaired school district identification are excluded from this study. For purposes of this evaluation, the focus was limited to the three years stated above.

The EOC staff worked with staff from the SC State Department of Education (SDE) to identify the following principal research question:

Does student achievement improve in schools assigned teacher specialists?

Five related questions also were identified:

- How has student achievement improved over time in schools assigned teacher specialists?
- Are there changes in the school community and/or culture during the years with teacher specialists?
- How has the teacher specialist program impacted upon the instructional skills and professional growth of the teachers involved?
- How has the program functioned over time?
- What are the unintended consequences of the teacher specialist program?

The EOC and SDE also work with the University of South Carolina (USC) Education Policy Center on the evaluation. The USC Center assumed responsibility for a comprehensive survey discussed in Part II of this report. Costs of the evaluation are borne by the SC Education Oversight Committee and the USC Policy Center. The EOC is funded through an Education Improvement Act appropriation and the USC Policy Center work is funded through a proviso in the General Appropriations Act that authorizes its work on projects mutually defined by USC, EOC and SDE.

Statutory Requirements

The Teacher Specialist on Site (TSOS) Program is one of five technical assistance strategies mandated in the Education Accountability Act of 1998. Each of these technical assistance strategies is targeted to improve the academic achievement of students as soon as possible and over time. Student achievement is measured by the state's accountability system that

[1] §59-6-10(A)(1), 1976 South Carolina Code of Laws, as amended.

incorporates standards-based assessments or academic outcomes appropriate to a school level. The TSOS program, administered by the SDE, provides exemplary teachers to work in demonstration and coaching roles with teachers in schools rated Unsatisfactory or Below Average. The statute provides,

> §59-18-1530(A). Teacher specialists on site must be assigned in any of the four core academic areas to a middle or high school in an impaired district or designated as below average or unsatisfactory, if the review team so recommends and recommendation is approved by the State Board of Education. Teacher specialists on site must be assigned at a rate of one teacher for each grade level with a maximum of five to elementary schools in impaired districts or designated as below average or unsatisfactory. The Department of Education, in consultation with the Division of Accountability, shall develop a program for the identification, selection, and training of teachers with a history of exemplary student academic achievement to serve as teacher specialists on site. Retired educators may be considered for specialists.
>
> (B) In order to sustain improvement and help implement the review team's recommendations, the specialists will teach and work with the school faculty on a regular basis throughout the school year for up to three years, or as recommended by the review committee and approved by the state board. Teacher specialists must teach a minimum of three hours per day on average in team teaching or teaching classes. Teacher specialists shall not be assigned administrative duties or other responsibilities outside the scope of this section. The specialists will assist the school in gaining knowledge of best practices and well-validated alternatives, demonstrate effective teaching, act as coach for improving classroom practices, give support and training to identify needed changes in classroom instructional strategies based upon analyses of assessment data, and support teachers in acquiring new skills. School districts are asked to cooperate in releasing employees for full-time or part-time employment as a teacher specialist.
>
> (C) To encourage and recruit teachers for assignment to below standard and unsatisfactory schools, those assigned to such schools will receive their salary and a supplement equal to fifty percent of the current southeastern average teacher salary as projected by the State Budget and Control Board, Office of Research and Analysis. The salary and supplement is to be paid by the State for three years.

The TSOS Program is constructed to provide daily coaching for teachers utilizing the professional development models and practices identified as effective by the National Staff Development Council.[2] Although not identical in structure or implementation, the statutory model is influenced by the experiences of the Kentucky Distinguished/Highly Skilled Educator and other state assistance programs in mind.[3] This report must note that the Kentucky Distinguished Educator Program currently employs 50 individuals in those roles to serve 90 schools.[4]

[2] National Staff Development Council, "NSDC Standards for Staff Development (Revised), 1998, 2001.
[3] Education Commission of the States, "What States Are Doing," 2000.

The roles and responsibilities of teacher specialists as published in the Teacher Specialist Handbook for 2002-2003 are the following:

- Provide the services of a teacher specialist for the two hundred-day contract;
- Teach a minimum of three hours per day on average in team teaching, tutoring, and/or demonstrating lessons;
- Assist the school faculty in gaining knowledge of best practices and well-validated alternatives designed to improve instruction;
- Demonstrate effective teaching and act as a coach for improving classroom practices, especially as it related to connecting activities to the state's curriculum standards and assessment system;
- Provide support and training to identify needed changes in classroom instructional strategies based upon analyses of assessment data;
- Assist school teams in analyzing test data to identify patterns and instructional deficiencies;
- Develop strategies for addressing instructional deficiencies, including techniques to improve classroom assessment, and to support teachers in acquiring new skills;
- Serve as an instructional leader by providing information and assistance in activities relevant to improving teacher quality and curriculum;
- Serve as a member of the assistance team if applicable and work collaboratively with other team members in performing job responsibilities;
- Participate in any and all training/staff development and assignments given and/or directed by the Department; and
- Abide by the guidelines established by the Department for the role and responsibilities of teacher specialists.[5]

The 2003-2004 Teacher Specialist Handbook deletes the last four bullets, but addresses other expectations in the areas of curriculum/instructional support, staff development, student performance, and professional development (see Appendix).

Factors Confounding the Implementation, Impact and Evaluation of the Program

The implementation, impact and evaluation of the Teacher Specialist on Site Program is confounded by four factors: variations in program implementation from that outlined in the statute; differences in school assistance staffing configurations in which teacher specialists are assigned; lack of specificity in roles and expectations within the configurations; and the challenge of implementing multiple improvement strategies in a coherent manner.

The statute presumes the integration of four technical assistance strategies in each of the identified schools and, upon the occasion of a district request, the assignment of a principal specialist. The four strategies include diagnosis of the critical challenges and recommendations for assignment of assistance personnel and other actions from an external review team, professional development for teachers using retraining grant allocations, extended learning for students through after-school programs and coaches for teachers to build expertise. The statute and subsequent provisos suggest assignment of teacher specialists to each grade or content areas as specified. [NOTE: In 2003-2004 the materials provided to external review teams do not include potential designation of a teacher specialist in social studies.] Although there is not a teacher specialist to teacher ratio specified in the statute, it is reasonable to

[4]Education Week, "State Unable to Help All Struggling Schools," January 7, 2004, pages 19-23.
[5]SC State Department of Education, "Teacher Specialist on Site: Teacher Specialist Manual," 2002.

expect that there are limits beyond which the teacher specialist is able to be as effective as the statute intends. Yet the data reported in Part II of this report and confirmed in the assignment of teacher specialists indicate that the specialist may work with as few as one teacher or as many as 20. While the external review team report provides for priority assignment of teacher specialists, neither a protocol for the priority decisions nor a statement of differing expectations relative to the number of teachers with whom a specialist works is available for review.

In response to differences and preferences among local districts and to overcome personnel shortages, the SDE has used varying numbers of teacher specialists in combination with principal specialists, principal leaders, curriculum specialists, curriculum facilitators and off-site support from SDE personnel. The combinations result in different configurations of working relationships and responsibilities to which the teacher specialists are assigned and dilute the data base from which judgments about the program can be made. Data presented in Part II of this study define a minimum of ten program configurations. For the 2003-2004 academic year, the SDE defines seven priorities among the three tiers and assigns personnel in accordance with those priorities. Because of the variations within and across the configurations it is difficult to attribute changes in achievement to the teacher specialist program.

The technical assistance model is premised upon the implementation of "best practices" as presented in the preparation provided teacher specialists by the SDE. The SDE employs a "leadership team strategy" rather than a specific instructional program framework (e.g., Success for All, Direct Instruction, School Development Program), with emphasis on team building, alignment of instruction with content standards and vertical curriculum calibration. Without a consistent and coherent program model to guide the integration of actions, the success or failure of the reform strategy cannot be attributed to particular policies and practices. The Northwest Regional Educational Laboratory recommends that reform models incorporate the following:

- Innovative strategies and proven methods that are based on reliable research and replicated successfully in schools with diverse characteristics
- A comprehensive design for effective school functioning;
- Measurable goals for student performance and benchmarks for meeting those goals;
- Commitment and support of school staff and community;
- Meaningful involvement of parents and local community;
- High quality external technical support and assistance;
- Evaluation plan for monitoring program implementation and assessing results in student achievement;
- Coordinated resources to maximize and sustain the school reform effort;
- High quality and continuous teacher and staff professional development.[6]

With differing understandings of which practices are best for the particular situation and changing personnel (both school and technical assistance) the instructional program provided students and the substance and nature of professional development and coaching provided to teachers can vary significantly from site to site. Variations in the model because of combinations of personnel increase the need for a defined program model to ensure fidelity of implementation. As the survey data report, teachers also expect the teacher specialist to provide instructional materials and/or tutoring services. While these may be needed, linking them to the teacher specialist attaches an expectation to the program beyond coaching and

[6]Northwest Regional Educational Laboratory: Evaluating Whole-School Reform Efforts, 2000).

may interfere with those coaching responsibilities. For example, in the data collection process for the 2003 annual review of retraining grants, nearly 20 percent of the respondents were teacher specialists which suggests that the teacher specialist is performing administrative functions. Data presented in Part II of this report affirm the need for teachers and principals to have a clear understanding of the program.

The program goal, as understood by participants, is to "get off the list;" that is, to improve the school's absolute rating. EOC and SDE leaders agree that sustainable change requires the development of capacity over time and that "getting off the list" is a short-term objective that may or may not incorporate those decisions and actions necessary for development of local capacity. [7]

Finally, the technical assistance strategies are implemented in an environment dominated by the need to improve all schools and the particular challenges of economic recession. Repeated mid-year reductions in funding impact program aspiration as well as program implementation. When managers suspect another budget reduction is to be imposed, they plan based upon the lower resources, and without intending to do so, may lower expectations for the program. Concurrent with the receipt of technical assistance, these schools are eligible and participating in an array of programs intended to promote higher achievement: e.g., the K-5 Enhancement grants, *Reading First*, SC Reading Initiative, math and science coaches, etc. These programs may or may not be integrated at the state, district or school level. Some South Carolina educators have suggested that program leaders are "fighting over the teachers." A study of reform implementation in the Chicago Public Schools indicates that, schools facing dramatic challenges may find themselves . . .

> "caught in a bind. They want to acquire programs and materials that might help them to teach more effectively, but they soon find themselves in a large and fragmented circuit of school improvement activity. Principals may recognize that faculty members' attention is scattered, but hooking up with multiple initiatives seems to be the only way to gain needed resources and to promote the commitment of staff with different interests and strengths. . .With so many demands, principals feel unable to refuse programs and reason that diverse programs will somehow complement one another. They continue to adopt or pilot programs but do little to establish or strengthen coordination and coherence among them." [8]

This circumstance is more common than good practice would support. Newmann, et. al. advocate that three conditions be met for instructional program coherence:

1) A common instructional framework guides curriculum, teaching, assessment,

[7] The pitfalls of varied understandings were cited recently in a study by the RAND Corporation. RAND evaluated the implementation of three different models implemented and supported in the Cincinnati School District. When teachers were surveyed; researchers determined that many were uncertain about what they were supposed to be implementing. The RAND Study found that only 57 percent of the teachers could identify the model being used in their school; 27 percent felt they could explain the model's philosophy to others; 44 percent were unclear about success criteria; 38 percent felt that lack of success would lead to termination of the program; 22 percent felt that their personal efforts would affect the success of the design and 23 percent said they had strayed from the design. Bodily, S.M., Keltner, B., Purnell, S. W., Reichardt, R.E., and Schuyler, G. L., *Lessons from New American Schools' scale-up phase: Prospects for bringing designs to multiple schools.* (Santa Monica, CA: RAND, 1998.)

[8] Newmann, Fred. M., Smith, BetsAnn, Allensworth, Elaine, and Bryk, Anthony S. "Instructional Program Coherence4: What It Is and Why It Should Guide School Improvement Policy," Educational Evaluation and Policy Analysis, V23, N4, winter 2001.

and learning climate. The framework combines specific expectations for student learning with specific strategies and materials to guide teaching and assessment;

2) Staff working conditions support implementation of the framework; and
3) The school allocates resources such as funding, materials, time and staff assignments to advance the school's common instructional framework and to avoid diffuse, scattered improvement efforts.[9]

Therefore, the program must be clarified to answer three fundamental questions: who is responsible to whom and for what; to what programs or services can improvement be attributed; and how can the model (when successful) be replicated?

PART II

THE TEACHER SPECIALIST ON SITE PROGRAM: Perceptions of Teachers, Teacher Specialists and Principals toward the Teacher Specialist on Site Program

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Introduction

A critical provision of the South Carolina's Education Accountability Act of 1998 mandated the development of school performance report cards for schools and school districts. The report cards, which grade schools as *excellent, good, average, below average, or unsatisfactory,* have been disseminated annually since November of 2001. For schools graded as unsatisfactory *or* below average, provisions in the Accountability Act specified several types of assistance that should be made available to assist these schools with improving student performance. The

[9]Newmann, et. al.

assistance strategies included the provision of principal specialists, principal mentors, teacher specialists, homework centers, and retraining grants for professional development.

The largest program currently serving unsatisfactory or below average schools in the state is the Teacher Specialist On-Site Program (TSOS). This program provides low-performing schools with master teachers who work with classroom teachers to improve instruction. According to the Accountability Act (SC Code of Law, § 59-18-1530 (B)):

> Teacher specialists must teach a minimum of three hours per day on average in team teaching or teaching classes. Teacher specialists shall not be assigned administrative duties or other responsibilities outside the scope of this section. The specialists will assist the school in gaining knowledge of best practices and well-validated alternatives, demonstrate effective teaching, act as coach of improving classroom practices, give support and training to identify needed changes in classroom instructional strategies based upon analyses of assessment data, and support teachers in acquiring new skills.

Teacher specialists have been assigned to low-performing schools since 1998 when they were first placed in schools within districts designated as *impaired* under the Education Improvement Act of 1984. Table II-1 shows the number of schools and districts served by teacher specialists for the period 1999-2003. The number of teacher specialists has grown from 31 in the first year of the program to 202 during 2002-2003.

Table II-1
Number of Schools and Districts Served by Teacher Specialists (1999 to 2003)

School Year	Districts	Number of Schools	Number of Specialists
1999-2000	3	9	31
2000-2001	7	27	74
2001-2002	19	62	146
2002-2003	32	84	202

In 2002 the South Carolina Educational Policy Center (SCEPC) in the College of Education at the University of South Carolina was asked to assist the Education Oversight Committee (EOC) in a three-year review of the TSOS program. In collaboration with staff from the EOC and from the Office of School Quality at the South Carolina Department of Education, a study of 17 schools with teacher specialists was conducted by the SCEPC. The schools were selected for inclusion in the study because they had participated in the program for at least two years and had a minimum of three teacher specialists assigned to the school. Principals, teachers, and teacher specialists in the 17 target schools were administered questionnaires designed to assess program climate, implementation, and effectiveness.

The results of the year one analysis indicated that most teachers, principals, and teacher specialists viewed the TSOS quite favorably: 71% of teachers, 79% of principals, and 84% of teacher specialists assigned a grade of “A” or “B” to the program. Support was broad-based, with the favorable assessment persisting across organizational levels, educational training, and years of experience. Despite the generally favorable climate for the program, only 46% of the teachers and 56% of principals agreed that they felt “ownership” in the TSOS program. It was noteworthy that principals and teachers who received no training/orientation about the program before the first day of school had less favorable views than those receiving training. About two-

thirds of teachers and 88% of principals said that the program had contributed greatly to the effectiveness of the instructional program at the school. Teachers were most positive about the competence of the teacher specialists and the specialists' knowledge of the state curriculum standards. Between 5% and 15% of the teachers were consistently negative about the program and the work of the teacher specialists.

Method

The primary purpose of this second year study was to extend the program assessment to all 84 schools in which 202 teacher specialists were assigned during 2002-03. Forty-six schools were in their first year of program participation, 22 were in their second year, seven were in their third year, and nine in their fourth year. The number of teacher specialists per school ranged from one to eight with an average of 2.4. During April 2003, district superintendents and the principals of program schools were mailed letters from the South Carolina Educational Policy Center outlining the purposes of the study and urging cooperation. The State Department of Education also communicated the importance of the research effort and urged cooperation. In order to encourage both candor and a high return rate, it was emphasized in the correspondence and in the questionnaire protocols that data for individual schools and school districts would not be reported.

The principal, all teacher specialists, and teachers served by the teacher specialist program were asked to complete questionnaires during a faculty meeting. Separate questionnaires were prepared for the principals, teacher specialists, and teachers. The three distinct questionnaires included sections consisting of the following:

- Agreement items
- Frequency of teacher specialist activities
- Future emphases needed in the program
- Helpfulness of teacher specialist activities
- Outcomes
- Open-ended items
- Items describing the frequency of interactions with the specialist
- Items describing the respondent groups

While certain key items were included on all three questionnaires, not every section or item was included on all questionnaires since respondents interacted with specialists in accordance with their own roles and base of information. Thus, for example, principals were not asked how many days per week the teacher specialists spent in teachers' classrooms, but teachers and teacher specialists provided information on this question. Similarly, teacher specialists were not asked to judge the degree of helpfulness of specific activities.

Results

The return rate was about 95% for the selected schools and for the individual respondent groups. A return rate of at least 70% is generally regarded as a minimum for these kinds of questionnaires. Table II-2 presents the numbers of respondents by school organizational level and Table II-3 shows the educational levels of the respondents.

Table II-2

Number of Respondents Included by School Organizational Level

School Level	Principals	Teachers	Teacher Specialists
Elementary	36	381	95
Middle	22	251	42
High	21	223	39
Unknown	0	3	5
Total	79	858	181

Table II-3
Educational Levels of Respondents

Position	BA	BA +18	MA	MA +30	Ed.S	Doctorate
Principals	0%	0%	20%	49%	16%	14%
Specialists	0%	0%	22%	61%	7%	10%
Teachers	28%	26%	28%	16%	1%	1%

Participants in the study varied considerably in experience in their positions. While principals averaged about 8 years of experience as a principal, one-third of the 79 were in their first or second year, and 59% had served as principal in their current school two or fewer years. Eighty-four percent of the principals said that they planned to be back at the school next year. As might be expected, the teacher specialists were very experienced – with an average of 19 years teaching and two years as a teacher specialist. Three-fourths indicated that they planned to work as a specialist during the 2003-04 school year. Teachers reported an average of 13 years of teaching experience, with 16% in their first or second year of teaching. Thirty-eight percent of the teachers were in their first or second year at the school. The turnover rate among teachers working with teacher specialists was lower than anticipated: 83% said that they planned to teach at the same school in 2003-04, 7% were not sure, and only 10% stated that they would not be returning the next year.

Teacher participants typically had a continuing contract (74%), but 13% held annual, 8% induction, 4% provisional, and 1% no contract. Eighty-two percent of the teachers had a professional teaching certificate, 8% critical needs/PACE, while the remaining 10% had initial, temporary, or special subject certificates. Three percent were National Board certified, and another 7% had applied for that certification. As Table II-4 shows, schools varied in the extent to which their teachers had the highest levels of certification, licensure, and more than 2 years of experience. In some schools, all or a majority of teachers were veterans with the highest levels of certification or licensure. In other schools, the majority of teachers had been in the profession less than 2 years or held other types of certificates and licenses.

Table II-4
Number of Schools with Varying Levels of Teacher Certification, Licensure, and Experience

Indicator of Experience	Percentage of Teachers				
	0-25%	26-50%	51-75%	76-99%	100%
Professional Certificate	0	4	19	29	28
Continuing Contract	1	7	35	11	16
>2 Years Teaching	0	2	20	30	28

The number of principals and teachers new to their current school or new to the profession

make professional development training about the TSOS program very important. As shown in Table II-5, about one-third of the principals and more than three-fourths of the teachers received less than one hour of training/orientation before the first day of school in 2002-2003.

Table II-5
Percentages of Respondents by Amount of Training/Orientation

Group	None	<1 Hour	1-2 Hours	3-7 Hours	> One Day
Principals	22%	9%	26%	36%	6%
Teachers	59%	18%	15%	4%	5%

In response to questions about interaction patterns, both teachers and teacher specialists reported that the average number of teachers served by a specialist was about six. Teacher specialists reported working with between 1 and 20 teachers. The typical teacher said that the specialist met with her/him twice a week, while principals reported an average of 2.5 conferences per week with the specialists regarding instructional issues. Teacher specialists indicated that they were away from school an average of 1.1 days per month, and principals reported a similar figure, 1.5 days per month. The results of the study are summarized for each respondent group in the following sections of this section.

Program Climate

As shown in Table II-6, about 8 in 10 teachers and 9 in 10 principals and specialists agreed that the climate for implementation of the program was positive. More than 90% of the respondents indicated mutual respect, and almost as high percentages said that teachers, administrators, and teacher specialists were working well together to implement the program. About 85% of teachers and principals said that they trusted the teacher specialist. However, only 71% of the teachers said that they felt comfortable going to the teacher specialist with a personal problem. Interestingly, 90% of the teacher specialists agreed that teachers felt comfortable going to the teacher specialist with a personal problem.

Table II-6
Percentages of Respondents Agreeing with Program Climate Items

Item	Group	Disagree	Not Sure	Agree
The climate for implementation of the TS program is positive.				
	PRINCIPAL	5%	5%	90%
	SPECIALIST	7%	4%	90%
	TEACHER	10%	11%	79%
Teachers, administrators, and TSs are working together to implement the program	PRINCIPAL	3%	1%	96%
	SPECIALIST	6%	5%	89%
	TEACHER	10%	7%	83%
Teacher, principal: I respect TS. TS: I have respect of faculty.	PRINCIPAL	1%	0%	99%
	SPECIALIST	1%	2%	97%
	TEACHER	4%	3%	93%
The TS treats me with respect.				
	PRINCIPAL	1%	1%	97%
	TEACHER	6%	3%	92%
I believe that I have the respect of the principal.				
	SPECIALIST	3%	4%	93%
Teacher, principal: I enjoy working with TS. TS: I enjoy working with the teachers.				
	PRINCIPAL	4%	1%	95%
	SPECIALIST	1%	1%	98%
	TEACHER	8%	6%	86%
Teacher, principal: I trust the TS. TS: The faculty trusts me.				
	PRINCIPAL	4%	11%	85%
	SPECIALIST	1%	8%	92%
	TEACHER	8%	7%	84%
Teachers are comfortable going to TS with personal problems				
	SPECIALIST	9%	2%	90%
	TEACHER	18%	11%	71%
My TS cares about me as a person.				
	TEACHER	5%	11%	84%

Program Implementation

Table II-7 shows that while nearly all principals and teacher specialists agreed that they understood both the mission and the roles and responsibilities of the teacher specialists, fewer teachers said so. Fourteen percent of the teachers responding either disagreed or were not sure that they understood teacher specialist roles and responsibilities. Ninety percent of the teacher specialists and principals indicated that program implementation had gone smoothly, but 80% of the teachers agreed with the statement. When responding to the item: "I would like the teacher specialist to spend more time working with me," 63% of the teachers agreed, 26% disagreed and 11% were not sure. Of the 37% not agreeing, some portion probably felt that the current time allocation was sufficient.

Table II-7
Percentages of Respondents Agreeing with Program Implementation Items

Item	Group	Disagree	Not Sure	Agree
I understand the mission of the TS program.				
	PRINCIPAL	0%	0%	100%
	SPECIALIST	0%	0%	100%
	TEACHER	4%	5%	90%
I understand the roles and responsibilities of the TS.				
	PRINCIPAL	0%	4%	96%
	SPECIALIST	1%	2%	98%
	TEACHER	5%	9%	86%
The faculty understands the roles and responsibilities of the TS.				
	SPECIALIST	8%	10%	82%
The TS program implementation has gone smoothly this year.				
	PRINCIPAL	8%	3%	90%
	SPECIALIST	4%	6%	90%
	TEACHER	10%	10%	80%
I would like the TS to spend more time working with faculty (me).				
	PRINCIPAL	1%	11%	88%
	TEACHER	26%	11%	63%
I have enough time to work with the teachers here.				
	SPECIALIST	20%	3%	77%

Key Teacher Specialist Traits, Behaviors, and Skills

As indicated by Table II-8, nearly all principals agreed that the teacher specialist had the content knowledge to be effective (97%), modeled instruction well (96%), had responded promptly to requests for assistance (96%), and had helped the faculty incorporate curriculum standards (97%). Comparable figures for teachers to these items were 89%, 86%, 91%, and 85%. For the item, "The help from the Teacher Specialist is tailored to professional development needs," 12% of teachers disagreed, and 6% marked not sure. In contrast, 99% of teacher specialists agreed, and 1% were not sure.

Table II-8
Percentages of Respondents Agreeing with Items Pertaining to Specialist Traits/Skills

Item	Group	Disagree	Not Sure	Agree
The TS has the content knowledge to be effective				
	PRINCIPAL	1%	1%	97%
	TEACHER	6%	5%	89%
The help from TS is tailored to professional development needs.				
	SPECIALIST	0%	1%	99%
	TEACHER	12%	6%	82%
My TS demonstrates an excellent knowledge of the state curriculum standards.				
	TEACHER	4%	4%	92%
The TS program has helped the faculty incorporate curriculum standards.	PRINCIPAL	1%	1%	97%
	SPECIALIST	0%	1%	99%
	TEACHER	11%	4%	85%
TS promptly responds to my requests for assistance.				
	PRINCIPAL	1%	3%	96%
	TEACHER	6%	3%	91%
I was well prepared for my role as TS.				
	SPECIALIST	6%	5%	90%
The TS models instruction well.				
	PRINCIPAL	3%	1%	96%
	TEACHER	7%	6%	86%

Program Support

Table II-9 indicates that many teachers (40%) and teacher specialists (19%) were "not sure of the support for the program by the local school district superintendent. Principal support was viewed as strong by teacher specialists (91%) and by teachers (86%). In response to the item, "I support the teacher specialist program," 92% of principals agreed. The comparable figures for teacher specialists and teachers were 99% and 84%, respectively. Ninety-four percent of the principals agreed that they had been actively involved in program implementation, but 75% said that they had a sense of ownership in the program. For teachers, only 57% agreed that they had a "sense of ownership," 19% were not sure, and 24% disagreed.

Table II-9
Percentages of Respondents Agreeing with Program Support Items

Item	Group	Disagree	Not Sure	Agree
I support the TS program.				
	PRINCIPAL	3%	5%	92%
	SPECIALIST	1%	1%	99%
	TEACHER	8%	8%	84%
The principal at this school supports the TS program.				
	SPECIALIST	3%	6%	91%
	TEACHER	3%	11%	86%
The superintendent in this school district supports the TS program.				
	PRINCIPAL	3%	9%	88%
	SPECIALIST	3%	19%	78%
	TEACHER	2%	40%	57%
I have a sense of ownership in the TS program.				
	PRINCIPAL	10%	15%	75%
	TEACHER	24%	19%	57%
I have been actively involved in the implementation of the TS program.				
	PRINCIPAL	1%	5%	94%

Program Effectiveness

As shown in Table II-10, 83% of teachers said that they used instructional strategies learned from the teacher specialist and 80% agreed that the teacher specialist had helped them become a more effective teacher. Seventy-one percent said that they had more confidence in their ability to teach students since working with the specialist. Eighty-nine percent of teachers and 94% of principals agreed, "You can count on the teacher specialist to be at school, on the job, helping the school improve." Almost three-fourths of the teachers and more than four in five principals said that the program should continue to be funded. Thirteen percent of each group was not sure about continued funding, while 13% of teachers and 5% of principals disagreed with the item. The item dealing with continued operation of the program at the school yielded about the same results. The responses to both of these items could have reflected ambivalence about budget priorities. In response to one of the open-ended items, several respondents commented about the incongruity of reducing teaching staff size (as a result of budget cuts) while continuing to fund the teacher specialist program. An important indicator of program effectiveness was the response to this item: "The teacher specialist program has contributed greatly to the effectiveness of instruction at this school." Figure 1 depicts the response to this item.

Table II-10
Percentages of Respondents Agreeing with Program Effectiveness Items

Item	Group	Disagree	Not Sure	Agree
The TS program has contributed greatly to the effectiveness of instruction.				
	PRINCIPAL	5%	6%	89%
	SPECIALIST	1%	7%	93%
	TEACHER	13%	13%	74%
If it were up to me, the TS program would operate at this school next year.				
	PRINCIPAL	5%	5%	90%
	TEACHER	16%	10%	73%
Teachers (I) use instructional strategies learned from TS.				
	SPECIALIST	2%	3%	95%
	TEACHER	14%	4%	83%
The TS program should continue to be funded.				
	PRINCIPAL	5%	13%	82%
	SPECIALIST	0%	2%	98%
	TEACHER	13%	13%	74%
You can count on TS to be at school, on the job, helping the school improve.				
	PRINCIPAL	3%	4%	94%
	TEACHER	5%	6%	89%
Teachers go to TS to get advice on classroom problems.				
	PRINCIPAL	1%	0%	99%
	SPECIALIST	2%	1%	98%
	TEACHER	18%	3%	79%
The TS has helped me become a more effective teacher.				
	TEACHER	14%	5%	80%
I have more confidence in my ability to teach students since working with the TS.				
	TEACHER	21%	8%	71%

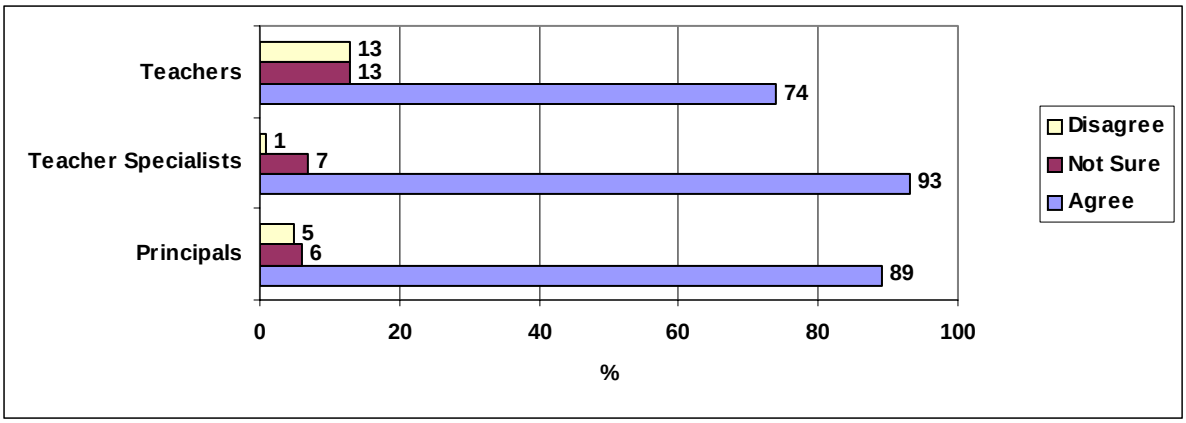

Figure 1. Percentages of respondents agreeing, disagreeing, and marking "not sure" to the item: The TSOS has contributed greatly to the effectiveness of instruction at this school

Frequency of Activities with the Teacher Specialist

Teachers were asked to indicate how often they worked with the teacher specialist on 15 activities. The five options ranged from "never" to "very often (several times a week or daily)." Similarly, teacher specialists were asked to use the same scale to express the frequency with which they conducted activities with teachers. For example, if a teacher specialist conducted an activity with 1 or 2 of 10 teachers in a school daily, the teacher specialist would list the activity as occurring daily. Only one or two teachers, on the other hand, would list the activity as occurring daily. In this hypothetical instance, the discrepancy between teacher specialist account (100%) and the teachers (20%), is a result of the perspectives from which the counts were taken and is more apparent than real. For this reason, Table II-11 below presents the percentages of respondents marking "often" or "very often" plus the rank of the percentage for the top five activities organized by teacher respondent rank. Discrepancies in

Table II-11
Percentages of Respondents Working "Often" or "Very Often" on Activities with Teacher Specialists and the Ranks

	Teachers		Teacher Specialists		
Activities	%	Rank	%	Rank	Difference in Rank
Providing new instructional materials, etc.	69%	1	85%	4	3.0
Sharing new strategies for instruction	63%	2	92%	1	1.0
Helping align instruction to the standards	61%	3	91%	2	1.0
Learning about the state curriculum standards	56%	4.5	84%	5.5	1.0
Helping teachers work together as a team	56%	4.5	65%	12	7.5

rank may be a better indicator of real differences in perspectives than are the absolute percentages. The percentages of teachers and specialists marking "often" or "very often" were moderately correlated (r = .56). Table II-11 reveals that the ranks of the differences were

similar for many activities. The ranks of the percentages for teachers and teacher specialists were high for sharing new strategies for instruction ("2" for teachers and "1" for specialists), and for helping align instruction to the standards ("3" for teachers and "2" for specialists). The highest rank for the teachers was for providing new instructional materials, which was the fourth highest ranked activity for the specialists. The correlation between the ranks of the activities was .70.

Level of Emphasis Needed in the Future

Principals, teachers, and specialists were asked to indicate whether the activities discussed in the previous section should receive more emphasis, less emphasis, or the same (or about the same) emphasis in the future. The percentages of respondents marking the activity were ranked.

Table II-12
Ranks of the Percentages of Respondents Marking "More" Emphasis Needed

	Teachers	Principals	Specialists
Tutoring students	1.0	14.0	13.0
Helping to use student assessment data	2.0	1.0	1.0
Team teaching with teacher	3.0	3.5	7.5
Demonstrating or modeling lessons	4.5	7.0	14.0
Developing student assessments aligned with the standards	4.5	2.0	2.0
Developing pacing guides	6.0	9.0	5.0
Helping teachers work together as a team.	7.0	10.0	3.0
Sharing new strategies for instruction	8.0	3.5	12.0
Helping plan or develop lesson plans	9.0	11.0	4.0
Identifying areas of instruction that need addressing	10.0	5.0	6.0
Helping align instruction to the standards	11.5	7.0	10.0
Providing new instructional materials, books, etc.	11.5	15.0	15.0
Observing teaching and giving me feedback	13.0	12.5	9.0
Learning about the state curriculum standards	14.0	12.5	11.0
Helping with classroom management.	15.0	7.0	7.5

Table II-12 indicates that there is substantial agreement among the groups for the highest ranked activities (helping to use student assessment data and developing student assessments aligned with the standards). The largest discrepancy among the ranks was for tutoring students. Here, teachers wanted more emphasis placed on tutoring, ranking it first, while specialists and principals ranked it 13th and 14th, respectively. These data suggest that there is potential confusion about the mission and the roles and responsibilities of the teacher specialists.

Degree of Helpfulness of the Activities

Table II-13 reflects the responses of principals and teachers when asked to indicate the degree to which the activities had proved helpful. If the respondent had not participated in the activity, she/he was to mark HNP.

Table II-13
Percentages of Respondents Marking Degree of Helpfulness

Activity	Group	HNP	Not Helpful	Somewhat Helpful	Helpful	Very Helpful	Rank Very
Demonstrating or modeling lessons	Principal	0%	1%	8%	33%	58%	1.0
	Teacher	0%	5%	16%	28%	51%	2.0
Team teaching with teachers	Principal	4%	1%	13%	49%	33%	11.5
	Teacher	0%	7%	16%	35%	42%	7.5
Observing teaching and giving feedback	Principal	0%	1%	13%	43%	43%	6.0
	Teacher	0%	7%	18%	34%	42%	7.5
Helping plan or develop lesson plans	Principal	0%	1%	8%	42%	49%	5.0
	Teacher	0%	7%	17%	34%	41%	9.0
Sharing new strategies for instruction	Principal	1%	0%	8%	38%	53%	2.5
	Teacher	0%	4%	16%	31%	49%	3.0
Helping align instruction to the standards	Principal	1%	0%	13%	33%	53%	2.5
	Teacher	0%	5%	14%	33%	48%	1.0
Providing new instructional materials, etc.	Principal	5%	1%	12%	45%	37%	10.0
	Teacher	0%	3%	11%	31%	55%	1.0

Activity	Group	HNP	Not Helpful	Somewhat Helpful	Helpful	Very Helpful	Rank Very
Helping with classroom management	Principal	6%	5%	28%	35%	26%	15.0
	Teacher	0%	15%	25%	30%	29%	15.0
Helping teachers work together as a team	Principal	6%	3%	24%	39%	28%	14.0
	Teacher	0%	9%	21%	35%	35%	13.0
Tutoring students	Principal	8%	3%	13%	43%	33%	11.5
	Teacher	0%	7%	19%	30%	43%	6.0
Helping to use student assessment data	Principal	1%	3%	16%	41%	39%	8.0
	Teacher	0%	8%	23%	35%	34%	14.0
Developing assessments aligned w/ standards	Principal	1%	1%	16%	43%	38%	9.0
	Teacher	0%	7%	17%	36%	39%	11.5
Developing pacing guides	Principal	13%	3%	19%	37%	29%	13.0
	Teacher	0%	8%	19%	34%	39%	11.5
Learning about the state curriculum standards	Principal	0%	1%	12%	45%	42%	7.0
	Teacher	0%	5%	17%	34%	44%	5.0
Identifying areas of instruction that need addressing	Principal	0%	1%	13%	35%	51%	4.0
	Teacher	0%	7%	17%	37%	40%	10.0

Inspection of Table II-13 reveals that the ranks of the percentages (last column) were often similar for teachers and principals: demonstrating or modeling lessons, helping align instruction to the state standards, and sharing new strategies for instruction were in the top three for both groups. Helping teachers work together as a team and helping with classroom management were ranked at the bottom by both groups. The correlation between the principal and teacher rankings was .60. Between 3% (providing new instructional materials and supplies) and 15% (helping with classroom management) of the teachers indicated that the work of the teacher specialists was not helpful.

Outcomes

For the outcomes section of the questionnaires, respondents were asked to indicate if they believed that the specified outcome had occurred at their school by checking “yes” or “no.” If they checked “yes,” they were requested to rate the degree of contribution of the teacher specialist program to that outcome on a four-point scale: “great contribution,” “moderate contribution,“ “slight contribution,” and “no contribution.” The outcome data are presented in Table II-14.

The data in Table II-14 indicate that between 80% and 100% of the respondents answered “yes” to the items. As has been the case with the other questionnaire sections, the teacher specialists provided the most favorable responses, followed by the principals, and then by the teachers. Teachers were most positive regarding the greater availability of additional resources and the better curriculum alignment with state standards. Fifty-eight percent and 51% of the teachers, respectively, ranked the program contribution to these objectives as “great.” For principals, improved instructional effectiveness and a greater focus on curriculum standards ranked first and second. Noteworthy is the close correspondence between the rankings of teachers and teacher specialists (see the last column).

Table II-14
Percentages of Respondents Indicating Occurrence of Outcomes and Their Degree of Contribution

Outcome			Degree of Contribution				
Group	Yes	No	No	Slight	Moderate	Great	Rank Great
Improved instructional effectiveness							
Principal	96%	4%	0%	10%	35%	56%	1.0
Specialist	99%	1%	0%	4%	38%	58%	5.0
Teacher	89%	11%	2%	15%	37%	45%	5.0
Better curriculum alignment with state standards							
Principal	95%	5%	0%	12%	52%	36%	6.0
Specialist	99%	1%	0%	5%	30%	65%	3.0
Teacher	88%	12%	3%	12%	34%	51%	2.0
Greater availability of additional resources							
Principal	92%	8%	1%	23%	43%	33%	7.0
Specialist	99%	1%	0%	9%	31%	60%	4.0
Teacher	93%	7%	2%	13%	27%	58%	1.0
Better understanding of state curriculum standards							
Principal	96%	4%	1%	12%	45%	41%	3.5
Specialist	100%	0%	0%	5%	29%	66%	2.0
Teacher	87%	13%	4%	15%	32%	49%	3.0
Improved student learning							
Principal	96%	4%	0%	13%	46%	41%	3.5
Specialist	98%	2%	0%	12%	43%	46%	8.0
Teacher	87%	13%	3%	24%	37%	35%	9.0
Higher expectations for students							
Principal	95%	5%	0%	15%	52%	32%	8.0
Specialist	97%	3%	0%	15%	35%	50%	6.0
Teacher	84%	16%	5%	22%	33%	40%	6.0
Improved school climate							
Principal	87%	13%	1%	30%	49%	19%	10.0
Specialist	89%	11%	1%	25%	49%	25%	10.0
Teacher	91%	9%	10%	21%	36%	33%	10.0
Greater focus on curriculum standards							
Principal	97%	3%	1%	7%	38%	53%	2.0
Specialist	99%	1%	0%	3%	29%	68%	1.0
Teacher	91%	9%	3%	16%	33%	48%	4.0
Better collaboration and teamwork among teachers							
Principal	92%	8%	0%	24%	51%	24%	9.0
Specialist	91%	9%	1%	24%	37%	38%	9.0
Teacher	80%	20%	7%	21%	36%	36%	8.0
Greater use of assessment data to identify areas for improvement							
Principal	91%	9%	3%	11%	47%	39%	5.0
Specialist	93%	7%	0%	20%	32%	49%	7.0
Teacher	84%	16%	4%	23%	36%	37%	7.0

Assigned Grades

One of the most telling outcome indicators was the overall grade assigned to the program by participants. Table II-15 presents the percentages of respondents assigning each "grade," and Figure 2 depicts the percentages assigning either an "A" or a "B."

Table II-15
Grades Assigned to the Program by Respondent Groups

Group	A	B	C	D	F
Principal	57%	29%	10%	4%	0%
Teacher Specialist	53%	41%	6%	0%	0%
Teacher	57%	22%	13%	6%	3%

Eighty-six percent of the principals, 94% of the specialists, and 79% of the teachers assigned either an "A "or a "B" to the TSOS program.

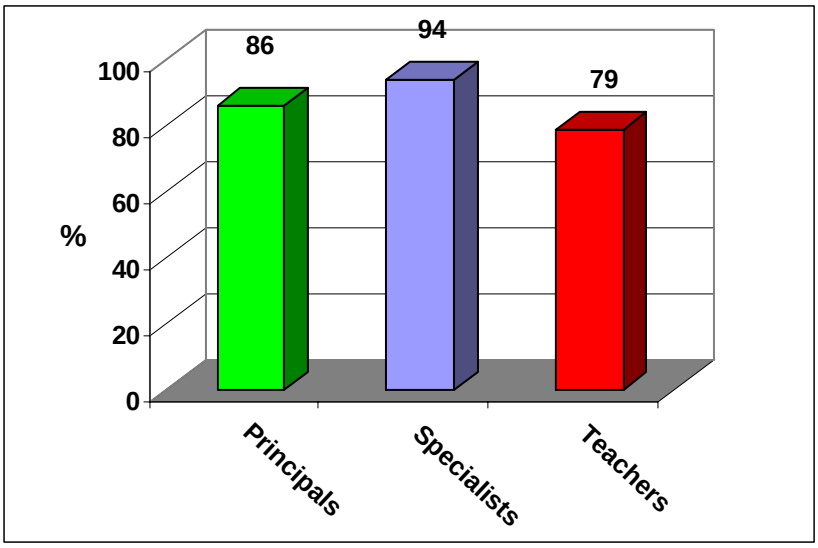

Figure 2. Percentages of respondents assigning to the program a grade of "A" or "B"

A grade of "C" was assigned by 6-13% of the respondents, and a small number of principals and teachers gave the program a "D" or an "F." When asked to describe why they assigned the grade they did, principals and specialists most frequently stated that the program improved teacher effectiveness, teacher skills, instruction, alignment of curriculum, student achievement, and similar types of statements. Forty-one percent of the specialists, 36% of the principals, and 24% of the teachers gave this type of response. One principal remarked, "The specialists' understanding of the standards and providing resources to staff was a great benefit. Teachers felt confident that they were being provided expert assistance when needed and could rely on the individual to answer questions and recommend solutions." A teacher specialist noted "We moved from unsatisfactory (school rating) to average in 3 years. The assistant superintendent stated that our school was a model of the success of the TSOS program."

Teachers most often wrote that the specialists were encouraging, helpful, supportive, and sensitive to teachers and inspired teamwork and collaboration (36%). One teacher described her specialist as "knowledgeable, conscientious, helpful, kind-hearted, and truly a 'model' teacher who is always positive and friendly." Another teacher said that her specialist was "always there. No question was too big or too small. Encouraging. Helped with issues that were difficult in a patient way. If not for my teacher specialist, I would have walked out the door in the first 9 weeks." Close to 30% of the principals and teachers also mentioned that individual specialists were very effective, hard working, and dedicated. This reason was also mentioned by 17% of the specialists. In describing one of the specialists, a teacher stated: "Our teacher specialist represented the program in a positive, respectable, awe-inspiring, knowledgeable way. His professionalism, knowledge, and openness were phenomenal. He worked well with our diverse department's personalities and always had viable suggestions."

All three groups of respondents described the teamwork and collaboration fostered by the specialists as a reason for the grade that they assigned. Thirty percent of the specialists, 29% of the teachers, and 25% of the principals mentioned this type of rapport and mutual trust as an important factor. One principal stated: "The teacher specialist team at my school worked well together and understood the importance of establishing trust among the teachers." When this sense of mutual trust was not present, respondents typically described negative experiences with teacher specialists as reasons for the assignment of program grades.

Fifteen percent of the principals and 8% of the teachers thought that the specialists needed more "people skills" or for other reasons were not a good match for the school. One principal wrote "the teacher specialists do not work in cooperation with the administration. There is constant undermining and division." A teacher stated that the specialist "has a wealth of information, but it was not shared in a positive way. Our teaching was constantly criticized and she tried to force changes on us instead of working with us." Another teacher said that the specialist's "people skills left loads to be desired. We actually avoid collaborating so as to avoid her." Similarly, teacher specialists reported some difficulties with teachers and administrators. Fourteen percent of the specialists cited lack of acceptance by teachers and "teacher resistance" as reasons for the grades they assigned. Twelve percent of the specialists noted that the program was not fully understood or supported by administrators. One specialist wrote that the "administration does not trust my experience and relationships with the teachers…I was permitted to meet with them as a group very seldom (2-3 times a year). My ideas were dismissed or scrutinized by administration, limiting my effectiveness."

Suggested Program Changes

Principals, teacher specialists, and teachers were asked to describe one characteristic of the teacher specialist program that they would like to see changed and to explain why. The most frequent change suggested by principals (27%) was that specialists should remain at one school for 2-3 years and that experienced specialists be kept at their same schools. Sixteen percent of the teachers and 13% of the specialists also mentioned this potential change. One principal said: "I would like for the state to allow the specialists to remain in a school more than one year. As soon as we get to know them, the state changes them to another school." Another principal asked for "a program with guaranteed consistency. If TSOS arrive and do well, that's their ticket to leave, a catch 22; leaving schools waiting to do poorly." Similarly, a teacher said: "I feel that they should remain at a school for three years. Taking them away because test scores have risen stop the momentum of change. We need their continued support."
Eighteen percent of the principals also mentioned that they would appreciate more flexibility in the specialist's role, especially in smaller schools. Principals mentioned wanting specialists to be able to work with more than one grade level, teach special classes such as advanced placement, help with standardized testing, or chair curriculum committees in the school. Nine percent of the teachers also requested that the specialists' role be more flexible so that specialists could go do things such as go on field trips, tutor students, evaluate teachers, or be in the classroom when the teacher is absent.

Teacher specialists most frequently mentioned that changes were needed in their relationship with the State Department of Education (SDE). Thirty-six percent of the specialists suggested that changes should be made in areas such as communication, monitoring, feedback, and support as well as reduced paper work requirements. Twenty-one percent of the principals also stated that they wanted more communication and assistance from the SDE, particularly with specialist evaluation and selection. One specialist stated: "There needs to be a better support system for TSOS in the schools. During this current year, TSOS have had very little support/contact from the SDE. TSOS are sent to schools under the leadership of principals who have a history of making bad decisions. Without the intervention and support of the SDE, TSOS can not be as effective." Another specialist who wanted feedback on her performance stated that "I've been in the program for two years and I've not been evaluated, visited, or observed in any way to assess my competence." One of the principals requested "when a specialist is assigned to a school, more communication between principal and state department would be helpful in order to offset the TSOS giving directives to the principal."

Teachers most frequently suggested that changes should be made to increase the time that the specialists spend in classrooms. Twenty-two percent of the teachers stated that the specialists needed to be more available or accessible to teachers and 7% of the principals also wanted to increase time that specialists spend with teachers. Teachers wrote that the specialists should increase instructional modeling, teaching demonstrations, and provide more feedback to teachers. Teachers thought that the specialists were being diverted from the classroom by the performance of "extraneous duties for administration," paperwork demands, meetings, or time away from the building. Ten percent of the specialists also thought that their non-instructional duties should be reduced. One teacher described how her teacher specialist was at first "closely involved in the classrooms helping teachers and students---then administration moved her nearer to them to focus on an administrator's school-wide remediation program and greatly

reduced her time for students and teachers." Another teacher said that "they (the specialists) appear to have to juggle needs for teacher and be answerable to administration simultaneously." One of the specialists stated that "I would like to see the TSOS program to become less of a tool for schools' administrative use. The TSOS end up rescuing the administration when reports such as the School Renewal Plan, etc. have to be done. The TSOS need to be left alone to work with the teachers." In a similar vein, another specialist noted that the specialists "now do a lot more than they were intended to do---write grants, write school improvement plans---and other things that are not instructional in focus."

The importance of training was noted by 27% of the specialists who said that principals and teachers needed a clearer understanding of the roles and responsibilities of the specialist. Ten percent of the teachers also mentioned that more information was needed about the specialists' duties and that the specialists needed to be evaluated and held accountable. One specialist stated: "I'd like to see clear cut mandates for teacher specialists be put in writing. I'd hear things about behavior referrals, giving grades, going on field trips, etc. at training or from specialists at other schools, but couldn't find clear instructions in my handbook. I value the freedom I am given as a professional, but please make sure I am aware of any absolutes I must adhere to." Similarly, one of the teachers said: "I would like a better description of what the program is supposed to do and their job requirements." Specialists also suggested that they needed to meet with the principal, teachers, and other school assistance providers before school started to plan and build a connection and sense of trust. The specialists (24%) also stated that they needed to meet regularly with other TSOS to collaborate, share strategies, and support each other. If funding prohibits statewide meetings, several specialists recommended that meetings could be held at the science/math hubs or that a list serve could be used to facilitate communication among specialists.

Discussion

In order to better understand the associations among the variables measured, a large number of correlational analyses were conducted with the data. The analyses included examining simple correlations among variables, multiple regression analyses between process and outcome indicators, and factor analyses of the teacher data. The factor structures derived from analyses of the teacher instrument essentially reflected the individual sections of the questionnaire. This finding is most likely a product of the distinctive nature of the sections of the instrument, which often had both different stem types and different response scales. Using orthogonal rotation, only the first section of the instrument, consisting of the five-choice agreement items, yielded more than one factor. The remainder of this section describes analyses that were conducted to further understand the relationships between certain types of questionnaire items and program outcome or program effectiveness items. The relationship between professional development training and program outcomes is presented first, followed by an analysis of the relationship between teacher qualifications and program outcomes. The final two sections describe models for predicting teacher perceptions of effectiveness and examine differences between teachers who support or do not support the TSOS program.

Professional Development Training and Program Outcomes

Although almost all respondents reported that they understood the mission and roles and responsibilities of the teacher specialists, many teachers said that specialists should spend more

time in activities, like tutoring students, an area of apparent confusion with respect to the teacher specialist job description. Forty-three percent of the teachers indicated that specialists should spend more time in this activity in the future, and only 3% said that they should spend less time. The training item ("How much training/orientation did you receive about the teacher specialist program prior to the first day of school this year?") provided five response options:

- None
- Less than an hour
- 1-2 hours
- 3-7 hours
- More than a day

Recall from Table II-3 that 59% of teachers and 22% of principals responded "none." An important consideration was the relationship between training and key outcome measures: Were participants who had a greater degree of awareness more likely to rate program outcomes more favorably? The answer to this question was yes. The linear correlations between amount of training and grade assigned, program effectiveness, and continued program operation were positive, but low for teachers (r = .19, .14, and .13, respectively for teachers), and near zero for principals. However, when the training variable was dichotomized, those teachers receiving less than 1 hour of training, versus those receiving an hour or more, the outcome variable differences shown in Figure 3 are striking.

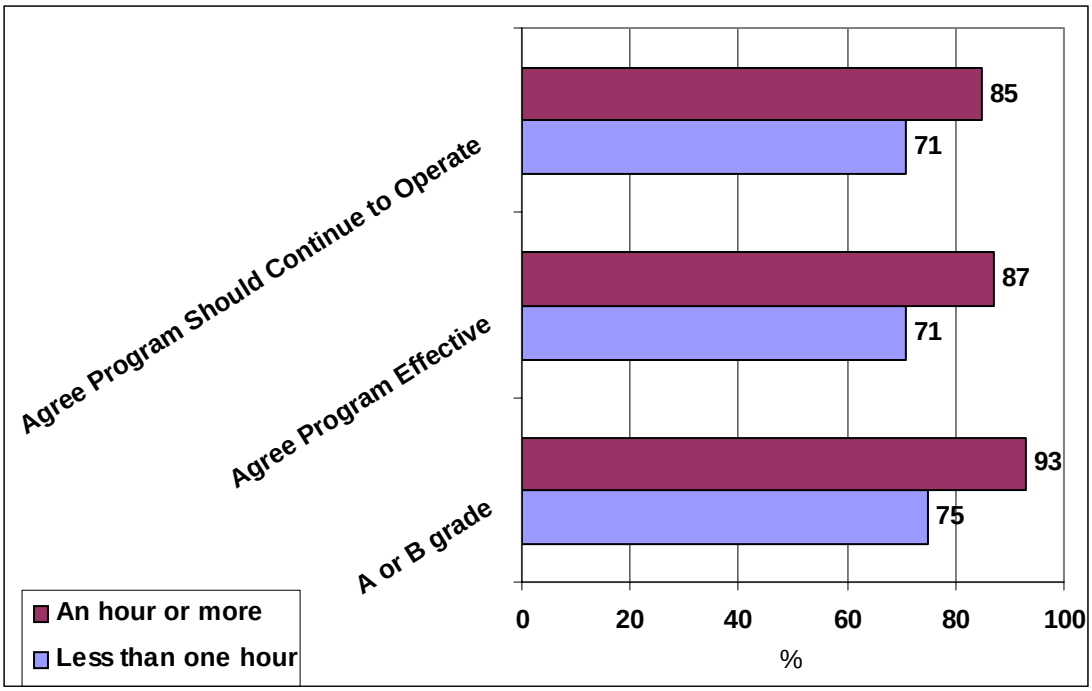

Figure 3. Percentages of Teachers with Varying Levels of Training

The differences in perceived outcomes between teachers with little or no training and those with an hour or more averaged 16 points for the three outcome measures.

The importance of training was highlighted when principals and teacher specialists responded to an open-ended question asking what types of professional development they needed to improve the program or the effectiveness of the specialists. Thirty-five percent of the principals said that they needed more extensive training on the responsibilities of the teacher specialists or how to effectively use the specialists in their schools. An additional 20% of the principals wanted opportunities to participate in the same types of training as the specialists during the year or to interact with other specialists. Twenty percent of the specialists also requested additional opportunities to interact with other specialists. Thirteen percent of the principals recommended that team-building activities occur before the start of school that would focus on how to build a team with the specialists and other assistance providers in the school. Team building was also of importance to the 20% of the specialists who asked for additional help in learning strategies for coaching and mentoring.

Contract Type, Certificate Type, Years Experience, and Program Outcomes

When contract type (continuing versus other), certificate type (professional versus other), and level of experience 3 or more years versus 1-2 years) were examined, the lesser-experienced, lesser-credentialed teachers were more favorable about program effectiveness. These findings are presented in Table II-16.

Table II-16
Percentages of Teachers Assigning Grade A or B and Agreeing on Program Effectiveness and Continuation by Certificate, Contract, and Teaching Experience Categories

Category		Grade A/B	Effective Program	Continue to Operate
Certificate	Professional	76%	74%	71%
	Other	79%	74%	81%
Contract	Continuing	74%	72%	69%
	Other	82%	77%	84%
Experience	1-2 Years	84%	80%	83%
	3 or More Years	78%	74%	72%

In contrast to the teachers, principals with more experience expressed more favorable views regarding program outcomes than principals with less experience. Of the 31 principals with 3 or more years experience, 29 (94%) assigned the program a grade of "A" or "B." Of 48 principals with 1-2 years experience, only 77% assigned the program a grade of "A" or "B." Similarly, a greater percentage (94%) of the experienced principals agreed that the program had "contributed greatly to the effectiveness of the instructional program at the school"; 81% of the less experienced group agreed with the statement. For the item dealing with the program continuing to operate in the school, 98% of the more experienced principals agreed; 74% of the less experienced group agreed with the item.

Predicting Teacher Perceptions of Program Effectiveness

A salient research issue in the present study was to identify the most potent "process" predictors of perceived outcomes. In other words, which process variables (e.g., implementation issues, specialist skills, and frequency of working with the specialist), as measured by the teacher questionnaire, were most strongly related to teacher perceptions of program effectiveness? Program effectiveness was measured by teachers' responses to three items:

- If you were to assign an overall grade to the effectiveness of the teacher specialist program at this school, what would that grade be?
- The teacher specialist program has contributed greatly to the effectiveness of the instructional program at this school.
- If it were up to me, I would have the teacher specialist program operating at this school next year.

Preliminary analyses indicated that the agreement items in Section 1 of the questionnaire were the most promising predictors of outcomes. A subset of 23 of the 30 agreement items were subsequently identified which reflected these formative processes. The 23 indicators plus 6 additional variables (the average number of times per week that the teacher reported meeting with the specialist; the number of times per week the specialist visited the teacher's classroom; the teacher's training, experience, certificate, and contract categories – discussed in the sections

above) were entered in a multiple regression analysis (Statistical Analysis Systems, PROC REG, using the MAXR option) to identify the best six-variable models. These results are presented in Table II-17.

Table II-17
Predictors of Key Outcome Variables

Criterion Variable = Grade Assigned to Program Predictor	F-Value	Prob > F
I trust my teacher specialist.	42.3	<.0001
The climate for implementation of the teacher specialist program is positive.	26.1	<.0001
My teacher specialist has helped me incorporate the state curriculum standards in my lesson plans.	23.8	<.0001
My teacher specialist has the content knowledge necessary to help me.	18.4	<.0001
The help I get from my teacher specialist is tailored to my needs.	15.9	<.0001
Teachers, administrators, and the teacher specialists are working well together to implement the teacher specialist program.	13.4	.0003
		R^2 = .68
Criterion Variable = Program Effectiveness Predictor	**F-Value**	**Prob > F**
Teachers, administrators, and the teacher specialists are working well together to implement the teacher specialist program.	49.1	<.0001
I go to my teacher specialist to get advice on problems that I have in the classroom.	43.5	<.0001
I understand the roles and responsibilities of the teacher specialist.	32.2	<.0001
My teacher specialist demonstrates an excellent knowledge of the state curriculum standards.	30.0	<.0001
My teacher specialist has helped me incorporate the state curriculum standards in my lesson plans.	26.3	<.0001
The teacher specialist program implementation has gone smoothly this year.	25.5	<.0001
		R^2 = 72
Criterion Variable = Continue to Operate Predictor	**F-Value**	**Prob > F**
The climate for implementation of the teacher specialist program is positive.	105.6	<.0001
I would like my teacher specialist to spend more time working with me.	51.0	<.0001
You can count on my teacher specialist to be at school, on the job, helping the school improve.	25.8	<.0001
My teacher specialist treats me with respect.	25.2	<.0001
Contract type (continuing versus other)	12.2	.0005
I go to my teacher specialist to get advice on problems that I have in the classroom.	11.7	.0007
		R^2 = .64

Inspection of Table II-17 reveals that the six variable models accounted for about two- thirds of the variation in the criterion indicators. Note also that for all three outcomes, a climate variable was the most potent process predictor. For grade assigned, it was trust, for program effectiveness, it was working well together as a team, and for continued program operation it was a favorable climate for the implementation of the program.

The only non-agreement item to enter any of the equations was contract type for continued program operation. Apparently, the climate for implementation, the level of trust in the specialist, and the sense of teamwork are crucial to program effectiveness. Given their preeminence, further research on the specific behaviors, traits, and activities reflected in these climate measures is needed. Beyond climate, items measuring specialist knowledge of content and the state curriculum standards were important predictors of effectiveness. It should be noted that average teacher scores on these three criterion variables, calculated at the school level, were only slightly related to principal scores on these same three outcome variables. For assigned grade, program effectiveness, and continuation of program operation, the correlations were .15, .20, and .20, respectively.

Characteristics of Supporters and of Nay Sayers

Although the TSOS received strong support from three-fourths of the teachers, the program was not without its detractors. Of the more than 800 teachers included in the study, about 18% (the nay sayers, or NS) assigned grades of "C," "D," or "F" to the program and also disagreed with the proposition that the program "has contributed greatly to the effectiveness of the instructional program at the school." In order to identify the areas in which concerns about the program were most pronounced, a comparison between teachers assigning grades of "A" or "B" and agreeing that the TSOS had contributed greatly to instructional effectiveness were compared with the NS group. The comparison between program supporters and nay sayers is shown in Table II-18. The item means in the table are the averages of the 5-point Likert scale for each item from a score of "1" ("strongly disagree") to "5" ("strongly agree"). The analysis shown in Table II-18 used an NS group of about 145 teachers and a "supporter" – or SUP group of about 580. Since participants did not respond to every item, the number of teachers in each group varied slightly, depending upon the item in question. Note that of the six items with the largest discrepancies - approaching two or more positions on the agreement scale, i.e., from "disagree" (2) to "agree" (4), or from "not sure" (3) to "strongly agree" (5) - are stated in the first person.

Table II-18
Discrepancies Between Nay Sayers and Supporters

Item	Mean NS	Mean SUP	Difference
I would be comfortable going to my teacher specialist with a personal problem.	2.1	4.4	2.3
I have a sense of "ownership" in the teacher specialist program.	1.8	4.1	2.2
I have more confidence in my ability to teach students since working with my specialist.	2.3	4.4	2.1
I go to my teacher specialist to get advice on problems that I have in the classroom.	2.4	4.4	2.0
I trust my teacher specialist.	2.8	4.7	1.9
I support the teacher specialist program.	2.8	4.7	1.9
The teacher specialist program implementation has gone smoothly this year.	2.6	4.5	1.9
The help I get in my classroom from my teacher specialist is tailored to my needs.	2.7	4.6	1.9
I use instructional strategies in my classroom that I learned from my teacher specialist.	2.7	4.5	1.8
Teachers, administrators, and specialists are working well together to implement TSOS.	2.8	4.5	1.7
I enjoy working with my teacher specialist.	3.0	4.7	1.7
The climate for implementation of the teacher specialist program is positive.	2.7	4.4	1.7
My teacher specialist models instruction well.	3.1	4.7	1.6
My specialist has helped me incorporate the curriculum standards in my lesson plans.	3.0	4.6	1.6
My teacher specialist has the content knowledge necessary to help me.	3.3	4.8	1.5
My teacher specialist cares about me as a person.	3.2	4.6	1.5
You can count on my specialist to be at school, on the job, helping the school improve.	3.3	4.7	1.4
My teacher specialist treats me with respect.	3.4	4.8	1.4
My teacher specialist promptly responds to my requests for assistance.	3.4	4.7	1.4
I understand the roles and responsibilities of the teacher specialist.	3.3	4.6	1.3
I would like my teacher specialist to spend more time working with me.	2.6	3.8	1.3
I respect my teacher specialist.	3.6	4.8	1.2
My specialist demonstrates an excellent knowledge of the state curriculum standards.	3.6	4.8	1.2
I understand the mission of the teacher specialist program.	3.6	4.6	1.0
The superintendent in this school district supports the teacher specialist program.	3.3	4.0	0.7
The principal at this school supports the teacher specialist program.	3.9	4.5	0.7

The highly discrepant items connoted a contrast in "personal distance" from the specialist. The SUP teachers indicated greater trust in the teacher specialist, more confidence in the specialist's ability to improve the skills of the teacher, and greater ownership in the program. In contrast, the NS group felt little ownership, had little confidence that the program was improving their teaching or meeting their needs, and saw little prospect of going to the specialist for advice regarding classroom or personal problems. The items with least discrepancy, perceived support by the principal and by the superintendent, had large portions of both groups marking "not

sure." Of the 26 items in the table, SUP means exceeded 4.0 (agree) in 25 cases. NS means were less than 4.0 for every item, and were below 3.0 (not sure) for 12 items. The circumstances that produced these differences merit further study.

Recommendations for Program Improvement

The current study of the TSOS program used questionnaire data sent to all 84 schools in the state where teacher specialists were placed during the 2002-2003 school year. Since 95% of the principals, specialists, and teachers returned their questionnaires, the results of the questionnaire analyses provide a solid database for consideration of the TSOS program. In general, a substantial majority of all respondents are pleased with the program's operation. More than three fourths of the respondents assigned the program a grade of "A" or "B." Despite this very favorable reaction of most respondents, findings from the present study suggest some potential areas for improvement in the implementation of the program. The following sections on the major topics of program evaluation and implementation models, identification of schools to be served by the TSOS, and staff development training discuss possible avenues for program improvement.

Program Evaluation and Implementation Models

Program evaluation is essential to the appropriate allocation of educational funding, particularly when financial resources become scarce. Without adequate evaluation design, ineffective programs can receive financial support and effective programs can be terminated. Typically the development of an evaluation design begins with a detailed specification of the "program" being implemented. After the program description is complete, appropriate data collection methodology is developed and subsequent analyses are planned. If possible, comparison sites where the program is not being used are selected so that program effects can be well documented.

In developing a description of the TSOS program, we found that the program took many forms in the 84 schools using teacher specialists. In addition to specialists (in varying numbers), the 84 schools also had other assistance providers in place. The following 10 models were identified during the course of this study:

- Teacher specialists only (42 schools),
- Principal specialist plus teacher specialists (4 schools),
- Principal specialist plus curriculum specialists plus teacher specialists (5 schools),
- Principal mentor plus teacher specialists (4 schools),
- Principal mentor plus curriculum specialists plus teacher specialists (5 schools),
- Principal mentor plus curriculum/instruction facilitators plus teacher specialists (1 school),
- Principal leader plus teacher specialists (1 school)
- Principal leader plus curriculum specialists plus teacher specialists (5 schools)
- Curriculum specialist plus teacher specialists (16 schools),
- Curriculum/instruction facilitator plus teacher specialists (1 school).

This type of variation in models related to the implementation of the teacher specialist program makes it very difficult to attribute any outcomes (such as increased student achievement) directly to the presence of the teacher specialists.

Recommendations. A discrete number of potential program implementation models should be developed and schools be allowed to select the model that they believe will most effectively address their needs as outlined in their revised school improvement plan. The models should be developed within the context of a comprehensive, ongoing evaluation design and be small enough in number to ensure evaluability. An annual review of program effectiveness should be conducted that addresses both overall program performance and the performance of the various implementation models.

Identification of Schools to Be Served by the TSOS

Currently, schools qualify for and receive technical assistance from the TSOS program based upon school-level performance during a single year. Schools that receive a rating of "unsatisfactory" or "below average" are assigned teacher specialists based on recommendations of the external review team and other factors such as availability of appropriate specialists. The teacher specialists working in schools during 2002-2003 were assigned to specific schools based on the report card ratings of the schools in the fall of 2001. When the report card ratings improve, specialists are removed from the school. This can create situations where specialists begin working in a school at the beginning of the year based on the previous year's report card, and then the new report card is issued in November with a higher rating that ensures the specialists removal at the end of the year. The specialists may have difficulty gaining the cooperation of the school's administration and faculty since everyone knows that the specialists will be gone at the end of the year.

The current method for allocating specialists also does not take into account other key factors such as the experience of the faculty, the educational level and prior training of the faculty, or the receptivity of the faculty and administration to program implementation. Consequently, specialists may serve in schools with quite different needs and levels of readiness for professional development. As described earlier, there was considerable variation among the schools in this study in teacher experience, teacher certification, and contract status, as well as variation in experience of the principal. For example, in 14 schools all of the teachers working with the specialists had more than 2 years of experience and held the highest levels of licensure and certification. There were also schools where teachers with National Board certification worked with specialists. Conversely, in 12 schools half or less of the teachers were experienced and held these high levels of licensure and certification. Similarly, while some schools had veteran principals, one third of the principals were in their first or second year of the principalship and 59% had served in their current school for 2 years or less.

Recommendations. The identification of schools to be served by teacher specialists should take into account longitudinal school performance and the needs of the teachers and administrators. School performance data for both absolute and improvement ratings should be examined over a 3-year period to establish priorities for the provision of services. For example, a school with unsatisfactory ratings for 3 years would be given priority over a school with a single unsatisfactory rating in 3 years. Once a school was identified for service, the assistance providers would be committed to a 3-year contract at that specific school. Districts and schools should also sign contracts assuring support and agreeing to follow the guidelines for the TSOS program. This would address the concerns voiced by the respondents about the need for stability in the program. In addition, the specific types and numbers of assistance providers should be determined based on a detailed analysis of the experience of the school administration and faculty as well as other factors currently in use. Diagnosis of individual

school staff needs will ensure that appropriate services are provided. It seems reasonable that an experienced, veteran faculty and administration will need different types and amounts of assistance than an administration and faculty of less experience.

Staff Development Training

The variability in experience and qualifications of teachers and principals as described in the previous section make it especially critical that all school personnel participate in training to ensure that they understand the goals of the program and the duties of the teacher specialist. Unfortunately, 59% of the teachers and 22% of the principals reported receiving no training on the TSOS before the start of school. An additional 9% of principals and 18% of teachers received less than one hour of training. While more than 75% of the respondents agreed that the climate for implementation of the TSOS program was favorable and approximately 90% stated that they understood the duties of the specialists, there were many indications in the data that roles were not well understood. Teachers, for example, wanted specialists to spend more time tutoring students and assisting with classroom instruction. Role confusion probably contributed to the negative perception of the program held by about 15% of the teachers.

Appropriate professional development for all those involved in the TSOS program is crucial to building the type of positive school climate characterized by mutual trust and respect that was found to be important in teachers' perceptions about the effectiveness of the TSOS program. While teachers' perceptions of effectiveness are not the same as documented student achievement test score gains, this sense of trust has been found by other researchers to be important in positive school reform. According to Bryk and Schneider (2002), schools with a high degree of "relational trust" between administrators, teachers, and parents are far more likely to make the kinds of changes needed to improve student achievement than schools where relationships are poor. They studied schools from Chicago and found that not all schools with high levels of trust improved, but schools with little or no relational trust had almost no chance of improving. Bryk and Schneider compared 100 schools that made the greatest improvement on achievement tests (reading and math) between 1991 and 1996 with 100 schools that made little or no improvement. They discovered that schools with high levels of trust at the beginning of reform efforts had a 1 in 2 chance of making significant improvements in reading and math achievement, while schools with low levels of trust had a 1 in 7 chance of making achievement gains. Among the schools with initially low levels of trust, only those schools where trust was strengthened over the course of reform efforts showed achievement gains. No school that continued to have low levels of relational trust improved student achievement levels to any appreciable degree.

Trust in leadership is emerging as a central research theme in the business management and public administration literatures. In a recent meta-analysis, Dirks and Ferrin (2002) quote Kramer (1999), who noted that trust is moving from "bit player to center stage in contemporary organizational theory and research (1999: 594)." Dirks and Ferrin not only found significant relationships between trust and job performance, their study suggests that trust in leadership is also related to attitudinal measures, such as job satisfaction and organizational commitment.

Recommendations. Prior to implementation of the TSOS program, every teacher and administrator in the selected schools as well as the district superintendent or designee should attend training to receive oral and written descriptions of approved and non-approved teacher specialist roles and responsibilities. Areas of potential confusion, such as teacher specialists

conducting student tutoring or writing school improvement plans, should be clarified prior to the beginning of the school year. Districts or schools that choose not to participate in training should not be assigned teacher specialists. School-level training might be conducted by the principal, district superintendent, and assigned specialists if a "train-the trainer" model is used.

The principal, specialists, and any other assistance providers should work as a team to develop a unified plan for raising student achievement and make certain that all curricula, professional development, and other assistance services are focused on major school goals. This plan should be based on an assessment of school climate and an analysis of the professional development needs of the school staff in relation to the school improvement plan for raising student achievement. Principals and the district superintendent should participate to the greatest extent possible in training opportunities provided to the specialists in order to build the capacity of the district and the principal as instructional leaders. Teacher specialists should be provided with professional development on the coaching and mentoring of adult learners and trained to deal with teachers who may not welcome their attentions. Ongoing opportunities for the specialists to interact with other specialists in person or through electronic means should be enhanced.

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PART III
THE TEACHER SPECIALIST ON SITE PROGRAM: Academic Achievement Review

Division of Accountability, Education Oversight Committee

This section of the report addresses on the five research questions identified for the three-year evaluation of the TSOS program. Before discussing the academic progress, it is important to understand the distribution and supervision of teacher specialists.

Selection and Assignment of Teacher Specialists on Site

The second annual school and district report cards, as provided for in the Education Accountability Act of 1998, were issued in November 2002 with the third report cards published in November 2003. The school ratings published on the report card served as the trigger mechanism for the placement of teacher specialists and other technical assistance personnel.

The ratings system identifies schools for technical assistance. The percentage of schools rated unsatisfactory or below average is shown in the table below. The total number of schools may vary across the three years as schools open, merge or close.

ALL SCHOOLS (K-2 Primary, Elementary, Middle and High)

Absolute Ratings	2001 Ratings	2002 Ratings	2003 Ratings
Unsatisfactory	6.4 %	5.2 %	4.2 %
Below Average	18.1 %	14.7 %	13.7 %

Using the premise that five (5) teacher specialists would be assigned to each school with some overlap, the SDE recruits for teacher specialist positions. Recruitment efforts include printed advertisements in professional and general public publications, regional question and answer sessions, direct mailings and word-of-mouth strategies.

The selection process requires applicants to submit professional credentials, evidence of student achievement and videotapes of in-class work. State committees interview applicants and a selection pool is developed. Each teacher in the selection pool is asked to identify geographic preferences. The teacher specialist candidates are interviewed by local district educators and, in accordance with local preferences, assigned. 152 teacher specialists were assigned to schools in 2001-2002; 202 teacher specialists were assigned in 2002-2003.[10] Placement of teacher specialists is contingent upon the specialist's area of certification, grade level or content area and willingness of the district and specialists to accept the assignment. Therefore, vacancies

[10] SC State Department of Education, "Teacher Specialist Program Update of 3/06/02", Columbia, South Carolina and confirmed by telephone with Mrs. Betty Garrison, November 2003 and through email from Dr. John Suber, January 2004.

may exist, creating a difference in the schools identified as eligible for service and those served. Recent conversations with SDE personnel indicate the 2003-2004 pool retains 60 qualified specialists who have not been assigned because of mismatches in certification areas or geographic placement and availability.

A number of challenges to developing a large applicant pool and assigning selected teacher specialists arose early in the process and persist. These include the following:

- The sending district/school is reluctant to release the teacher to serve in the specialist role. SC is experiencing teacher shortages in most certification fields and in specific geographic areas. Some administrators question the state's role as a competitive employer of teachers and fear that having their best teachers become teacher specialists has a negative impact on student achievement in the sending schools. A number of districts are increasing local incentives and creating exemplary teacher roles to retain the potential teacher specialist;

- The teacher specialist assignment is for one year only, although it may be renewed. Current specialists are not given priority in assignment over new applicants generating some frustration as reported in the perceptual data in Part II of this review;

- Rural areas, particularly those distant from the interstate highway system, appear to have difficulty attracting teacher specialists despite the salary supplement. These areas do not offer suitable housing, access to social and entertainment resources, and access to institutions of higher education for continuing education;

- Potential teacher specialists have family commitments and responsibilities; therefore, the disruption of moving one's family from one community to another counteracts the appeal of the salary supplement;

- And, as expressed in spring 2003, experienced teacher specialists are frustrated that the decision schedule for the teacher specialist program often falls after the school district contractual period. As districts reduce their teaching force in response to midyear budget cuts, potential teacher specialists are concerned that the conflicting schedules for contracts would result in no placement for them.

The EAA provides for differing levels of assistance to schools that are identified as unsatisfactory and to schools identified as below average. Schools rated unsatisfactory are assigned teacher specialists; by law, one is assigned per grade level in grades one through five and one per core academic content area (English/reading, mathematics, science and social studies) in grades six through twelve. Through a Fiscal Year 2003 proviso, the teacher specialist program is extended to include kindergarten teachers, and, in Fiscal Year 2004, a proviso permits the SDE to include teachers of students with disabilities and teachers of students who are English language learners. The EAA does not distinguish among schools with differing enrollments in its prescription for teacher specialists. Over the years, recognition is growing that the number of teacher specialists should vary with enrollment and with school organization; therefore, a proviso allowing for the allocation to include “an average of five teacher specialists per school” is included in the Fiscal Year 2004 General Appropriations Act.

Under authority of the Education Accountability Act, Act 46 of 2001 and subsequent provisos in the General Appropriations Act, the SDE defines three levels of technical assistance. The tiered

system, originally responsive to the shortage in teacher specialists, allows the SDE to allocate resource persons based on priorities among school needs. The SDE indicates that the proviso also fosters involvement from the Mathematics and Science Hubs as well as other SDE offices. For the 2001-2002 and 2002-2003 academic years the SDE defined three tiers in accordance with the schools' absolute indices: schools with an absolute index below 2.0 on a 5.0 scale; schools with an absolute index of 2.0 or 2.1; and schools with an absolute index of 2.2 through 2.5. The SDE has varied the tier placements in 2003-2004 to define seven priority levels of service across the three tiers; therefore, the indices bands cited above may not represent current assignments.

Do the tiers differ on other variables? Analyses of school profile data (from 61 schools in this study) published in fall 2002 and fall 2003 suggest some variation among the tiers, particularly on teacher factors and the percentage of students with disabilities. These data are displayed in the table below.

Table III-1
Summary of School Profile Data across Tiers

Profile Factor	Tier One		Tier Two		Tier Three		Other	
	2002	2003	2002	2003	2002	2003	2002	2003
Retention %	5.96	2.39	5.33	3.65	5.80	2.18	11.33	7.40
Older than Usual for Grade %	9.47	16.22	5.65	8.87	3.36	3.02	9.85	9.39
Student Attendance %	94.19	93.72	95.70	94.71	95.60	94.62	94.40	94.56
Students w/disabilities other than speech %	15.42	14.80	12.61	13.19	7.70	8.96	8.70	9.32
Students eligible for state gifted and talented %	3.13	3.08	4.46	5.33	7.72	5.92	3.65	4.55
Students suspended or expelled %	2.48	6.64	3.58	1.81	0.46	3.02	1.53	5.20
Teachers with advanced degrees %	39.70	40.22	42.63	42.36	43.10	45.66	35.95	39.64
Teachers returning from previous school year %	67.87	64.67	75.79	76.69	77.04	78.18		
Teachers with out-of-field permits %	8.86	2.12	4.76	3.75	4.42	2.10	2.29	2.41
Teachers on continuing contracts %	60.91	67.18	67.67	69.98	75.62	78.20	66.34	71.26
Teacher attendance %	95.13	95.06	95.08	94.64	94.40	94.04	95.16	94.02
Average teacher salary	37,655.11	38,346.11	37,659.31	37,887.31	36,212.80	37,420.40	36,155.09	36,856.73
Prof. Dev Days per teacher	11	12.56	9.24	11.13	11.70	14.74	9.98	13.41
Student Teacher Ratio	17.40	17.54	17.13	16.51	14.34	15.80	13.47	19.45
Prime Instructional Time %	88.92	86.62	88.92	87.51	88.96	86.26	88.55	85.99
Dollars spent per student	6466.00	7635.44	6257.90	7151.88	6008.80	7101.40	6632.90	7158.73
Percentage of $ spent on teacher salaries	62.86	47.11	61.68	59.65	55.66	61.06	60.44	60.76
Principal's Years at school	2.39	2.83	2.41	2.73	2.00	3.00	2.36	2.18
Parents attending conferences %	86.03	75.63	77.92	83.20	80.28	72.76	72.88	90.00

Schools rated below average may request an external review team prior to the development of

the school's improvement plan. A majority of these schools use a desk audit procedure to receive clearance to use grant funds.

The schools eligible beginning in 2001-2002, tier assignments, the placement of teacher specialists across the two years, ratio of teacher specialists to total teachers are displayed in Table III-2. The ratios vary within and across tiers. Teacher specialists work to improve instruction in the four academic content areas assessed by the state standards-based tests; therefore, the ratio built from the total number of teachers at a school is not precise to the teachers in those four areas; however, it does serve as a proxy for recognition of variations. These ratios should be viewed cautiously because a teacher specialist may work only with one grade level or content area. Ratios deemed to be effective should be developed and understood by teacher specialists, school administrators and faculty and external review teams. These variations are consistent with the SCEPC perceptual data reported in Part II of this report.

Table III-2
Assignment of Teacher Specialists 2001-2002 and 2002-2003 and 2002-2003 Ratios

District	School	Tier	2001-2002 TS Placed	2002-2003 TS Placed	2002-2003 Total Teachers	2002-2003 Ratio of TS to Total Teachers
TIER ONE						
Allendale	Allendale Fairfax Middle, 7-8	1	3	2	28	1:14
Charleston	MR Rivers Middle, 6-8	1	2	3	28	1:9.3
Charleston	Clyde Sanders Elementary, K-5	1	3	5	20	1:4
Hampton 2	Estill High, 8-12	1	0	1	35	1:35
Hampton 2	Estill Middle, 5-7	1	1	2	26	1:13
Jasper	Ridgeland Middle, 5-8	1	3	3	35	1:11.7
Lee	Dennis Intermediate 4-6 (formerly Bishopville Intermediate, 6)	1	4	4	38	1:9.5
Lee	Fleming Intermediate	1	2	4	Closed	
Lee	Mt. Pleasant Middle	1	3	3	34	1:11.3
Richland 1	WA Perry Middle	1	2	2	33	1:16.5
TIER TWO						
Anderson 5	South Fant Street	2	3	1	28	1:28
Bamberg 2	Denmark Olar Elementary	2	4	2	45	1:22.5
Bamberg 2	Denmark Olar Middle	2	3	3	21	1:7
Beaufort	Whale Branch Elementary	2	2	5	37	1:7.4
Beaufort	Whale Branch Middle	2	0	1	39	1:39
Charleston	Mary Ford Elementary	2	1	6	36	1:6
Charleston	Edmund Burns Elementary	2	3	3	46	1:15
Charleston	Brentwood Middle	2	0	2	56	1:28
Charleston	RD Schroder Middle	2	1	0	22	No placement
Clarendon 1	Scotts Branch Elem/Middle	2	2	2	26	1:13
Darlington	Spaulding Elementary	2	3	3	19	1:6.3
Dillon 2	JV Martin Middle	2	0	3	37	1:12.3
Florence 4	Brockington Elementary	2	6	6	43	1:7.1
Florence 4	Timmonsville Education Center	2	6	0	30	No placement
Greenville	Hollis Elementary	2	2	2	57	1:28.5
Greenville	Monaview Elementary	2	2	0	39	No placement
Greenville	Parker Middle	2	3	3	34	1:11.3
Hampton 2	Estill Elementary	2	0	1	41	1:41
Lee	Lower Lee Elementary	2	4	3	21	1:7
Marlboro	Bennettsville Middle	2	0	0	34	No placement
Orangeburg 3	Elloree Elementary	2	0	1	34	1:34
Orangeburg 3	Elloree High	2	1	4	37	1:9
Orangeburg 3	Holly Hill Middle	2	0	0	43	No placement
Orangeburg 5	Brookdale Middle	2	Closed			
Orangeburg 5	Rob. Howard Middle	2	1	3	44	1:14.7
Orangeburg 5	Bowman Middle/High	2	1	4	36	1:9

Richland 1	Alcorn Middle	2	3	2	52	1:26
Richland 1	Crane Creek/Forest Heights	2	6	0	46	No placement
Richland 1	Gibbes Middle	2	0	0	46	No placement
Richland 1	Watkins-Nance Elementary	2	6	0	36	No placement
Spartanburg 7	Whitlock Jr. High	2	2	3	52	1:17.3
Sumter 2	Mayewood Middle	2	3	1	20	!:20
Williamsburg	Battery Park Elementary	2	5	0	15	No placement
TIER THREE						
Allendale	Allendale Elementary	3	3	6	45	1:7.5
Allendale	Fairfax Elementary	3	5	6	29	1:4.8
Clarendon 1	Scotts Branch Elementary	3	3	2	26	1:13
Jasper	West Hardeeville Elementary	3	1	8	61	1:7.6
Spartanburg 7	Cleveland Elementary	3	1	1	39	1:39
OTHER						
Allendale	Allendale Fairfax High	Other	3	3	48	1:16
Bamberg 2	Denmark Olar High	Other	1	2	27	1:13.5
Clarendon 1	Scotts Branch High	Other	3	3	30	1:10
Lee	St Paul Primary	Other	4	0	26	No placement
Florence 4	Johnson Middle	Other	3	3	19	1:6.3
Jasper	Jasper County High	Other	2	2	40	1:20
Jasper	Ridgeland Elementary	Other	2	0	64	No placement
Lee	Bishopville Primary	Other	3	0	44	No placement
Lee	Lee Central High	Other	2	0	58	No placement
Lee	West Lee Elementary	Other	6	3	21	1:7
Marion 7	Rains/Centenary Elementary	Other	7	2	23	1:11.5
Marion 7	Terrells Bay/Creek Bridge High	Other	4	3	19	1:6.3

Source: SC State Department of Education, 2002, 2003 and 2004. The number of total teachers for 2002-2003 is taken from school profile on 2003 report cards.

Changes in school organization across the two years as well as shifts in the assignment of teacher specialists reduced the total number of teacher specialists assigned to these schools from 152 to 137. A pattern in the increase or reduction of teacher specialists is not readily apparent. Teacher specialists are assigned in accordance with the recommendations of the external review team (indicating a priority for assignment to a grade or content area). The external review team process focuses on four areas of policy and practice: governance and leadership; curriculum and instruction, professional development and student achievement. A defined protocol for team determinations of priority is not available as of this writing; therefore the determination of priorities is reliant upon the knowledge and expertise of individual teams. The recommendations and the subsequent school improvement plan are approved by the State Board of Education. The plan also triggers release of retraining grant funds. Reviews of the retraining grant program recommend that the plans be modified to link actions and expenditures to specific targets.[11]

Supervision and Evaluation of Teacher Specialists

Teacher specialists are employees of the SDE and work under the supervision of SDE personnel in the Office of School Quality but also are expected to work collaboratively with the school principal. During 2001-2002 two SDE personnel served as liaisons to the teacher specialists. During the 2003-2004 5.5 full-time equivalent SDE personnel were assigned to work directly with teacher specialists. The SDE personnel maintain personnel records, coordinate or provide professional development, and monitor e-mail logs and journals for all the teacher specialists. Requests from the SDE for the 2004-2005 academic year are premised upon a supervisory ratio of one supervisor to 20 technical assistance personnel (teacher specialists, curriculum specialists or facilitators and principal specialist or leader) and one administrative assistant for each 2.5

[11] SC Education Oversight Committee, Annual Review of the Retraining Grants Program, November 2003.

supervisors. As stated in Part II of this review, "[t]eacher specialists most frequently mentioned that changes were needed in their relationship with the State Department of Education (SDE). Thirty-six percent of the specialists suggested that changes should be made in areas such as communication, monitoring, feedback, and support as well as reduced paperwork requirements. Twenty-one percent of the principals also stated that they wanted more communication and assistance from the SDE, particularly with specialist evaluation and selections."

Teacher specialists are expected to work collegially and collaboratively with local district and school administrators. In most situations, as documented in the survey results and analyses, teacher specialists are able to achieve positive working relationships. The SCEPC survey data suggest that an acrimonious or unconstructive relationship between the administrator and the teacher specialists has a negative impact on program implementation. The SCEPC survey data also suggest some confusion in local expectations of teacher specialists. Some local educators view the teacher specialist as the provider of instructional materials and/or tutoring. While few would deny the need for these materials and services, linking them to the teacher specialist may shadow expectations and understanding of the teacher specialist role and responsibilities. The comparison of mean responses from program supporters and naysayers deepens the need for clear understanding of the assistance model and fidelity in its implementation.

Teacher specialists are evaluated by the State Department of Education. Performance is evaluated in relationship to the aforementioned duties. The teacher specialist is expected to submit documents required by the SDE including the following: weekly schedules, weekly logs, lesson plans, instructional focus plans and leave requests. The SDE also provides on-site monitoring, analyzes test results and other data, and reviews survey data from teachers and administrators working with the teacher specialist. The published materials do not indicate that the teacher specialists are responsible for specific changes in student achievement and/or school performance.

Teacher specialists focus on implementing "best practices," although these practices may not be defined or communicated distinctly across the program configurations in which teacher specialists are working. As stated in the introduction the assistance strategy is not linked to a particular instructional reform model, leaving decisions about best practices to the teacher specialist. Training provided to teacher specialists focuses on teamwork, curricular alignment and scaffolding, and instructional motivation. The teacher specialist model is best described as coaching, consistent with those practices encouraged by the National Staff Development Council. Variations in the specialist to teacher ratios (from 1:1 to 1:20 according to the SCEPC survey data and variations as noted in Table III-2), differing combinations of the state assistance personnel assigned to a school and variations in responsibility to local or state supervisors have the potential to confound the coaching relationship.

Direct Costs of the Teacher Specialist Program

The General Assembly appropriated $19.6 million in Fiscal Year 2002 for the Teacher and Principal Specialists Programs; in Fiscal Year 2004 the General Assembly appropriated $30.1 million for the programs. SDE documents indicate an increase in costs per teacher specialist in the areas of training and support materials. Salary projections from Fiscal Year 2002 to Fiscal Year 2005 have increased only by $1,697. The appropriation includes funding the SDE uses for materials and equipment, direct training, and SDE supervision.

RESEARCH QUESTIONS

As stated earlier, the principle question of the evaluation is "Does student achievement improve in schools assigned teacher specialists?" Neither the first or second year formative report intends to answer this question fully. Preliminary student and school achievement data are presented; however, the principle question is best answered with multi-year data to determine not only immediate impact but also sustainable impact.

This report presents preliminary data within the four of the five related questions.

How has student achievement improved over time in schools assigned teacher specialists?
To explore student achievement, two measures are used: student performance on state assessments and school ratings. Student performance on state assessments includes the Palmetto Achievement Challenge Tests (percentage of students scoring below basic and percentage of students scoring proficient and advanced), the Exit Exam (percentage of students passing all subtests on first attempt), and beginning in 2003, high school graduation rate.

The focus of the second year formative review is limited to those schools initially assigned teacher specialists in 2001-2002. Student achievement data for those schools is to be reviewed across the three years. The 61 schools originally included in the study, organized within the initial tier of service, are the following:

Tier One	Tier Two	Tier Three	Other
Allendale-Fairfax Middle	S. Fant Street	Allendale Elem	Allendale-Fairfax High
M. R. Rivers Middle	Denmark Olar E.	Fairfax Elem.	Denmark Olar High
Clyde Sanders Elem.	Denmark Olar M.	Scotts Branch Elem	Scotts Branch High
Estill High	Whale Branch E.		
	Whale Branch Middle	W. Hardeeville Elem	St. Paul Primary
Estill Middle	Mary Ford Elem.	Cleveland Elem.	Johnson Middle
Ridgeland Middle	Edmund Burns El.		Jasper County High
	Brentwood Middle		
Bishopville/Dennis Int. (2)	RD Schroder M.		Ridgeland Elem
Fleming Int.	Scotts Branch E/M		Bishopville Primary
Mt. Pleasant Middle	Spaulding Elem		Lee Central High
	JV Martin		
WA Perry Middle	Brockington Elem.		West Lee Elem
	Timmonsville Educ		Rains/Centenary
	Hollis Elem.		
	Terrells Bay High		
	Monaview Elem.		
	Estill Elementary		
	Parker Middle		
	Lower Lee Elem		
	Bennettsville Middle		
	Elloree Elementary		
	Elloree High		
	Holly Hill Middle		
	Brookdale Middle		
	Rob. Howard Middle		
	Bowman M/H		
	Alcorn Middle		

Tier One	Tier Two	Tier Three	Other
	Crane Creek/Forest Heights		
	Gibbes Middle		
	Watkins-Nance Elementary		
	Whitlock Jr. High		
	Mayewood Middle		
	Battery Park Elem		

Student performance on state assessments varies. Table III-3 and Table III-4 provide data on the percentage of students scoring below basic or proficient and advanced on PACT assessments and passing subtests of the Exit Exam on the first attempt. Neither the statute nor the State Department of Education establishes a minimum change expectation for schools in technical assistance. The calculation of the improvement rating index considers a net gain of 5 percent of PACT test scores as an "average" improvement. Should low performing schools be expected to achieve average improvement, particularly when those schools are provided substantial additional resources from the state? To examine this issue, the data are highlighted in accordance with the following scheme: green shading denotes improvements of 5 percent or more (i.e., reductions in the percentage of students scoring below basic or increases in the percentage of students scoring proficient or advanced or increases in the percentage of tenth grade students passing subtests on the first attempt) and red shading denotes losses of the same magnitude. School level data are used because grade level sample sizes are very small. Scores are taken from the SDE 2002 and 2003 test score reports. The five- percent threshold is chosen to minimize the impact of small enrollments. This analysis is based upon cohorts of students in membership at the school as of the 45th day of instruction and present for testing and their performance on the English language arts and mathematics assessments of the Palmetto Achievement Challenge Test if students were enrolled in grades three through eight.

Table III-3

Student Performance on State Assessments
2002 and 2003
Elementary and Middle Schools Assigned Teacher Specialists
Compared within Tier of Services

		PACT English language arts				PACT Mathematics			
	Initial Tier	% Below Basic		% Proficient or Advanced		% Below Basic		% Proficient or Advanced	
School		2002	2003	2002	2003	2002	2003	2002	2003
Allendale Fairfax Middle, 7-8	1	51.6	64.2	0.6	3.5	63.8	54.6	4.6	6.3
MR Rivers Middle, 6-8	1	63.8	63.6	4.6	1.4		67.6		3.1
Sanders Clyde Elementary, K-5	1	54.7	61.2	8.8	5.8	53.7	64.1	4	2.9
Estill Middle, 5-7	1	52.1	58.4	7.2	6	68.8	62.8	3.4	7.2
Ridgeland Middle, 5-8	1	63.6	61.6	6.8	5.6	47.7	66.2	15.2	4.3
Bishopville Intermediate, 6	1	Combined to form Dennis Intermediate							
Bishopville Intermediate, 4-5/Dennis Intermediate	1	50.7	53	9.4	6.8	58.1		8.2	
Fleming Intermediate, 4-6	1	47	Closed	8.7	Closed	57.1	Closed	7.1	closed
Mt. Pleasant Middle, 7-8	1	57.6	61	6	4.6	70.4	61.5	5.8	6.2
WA Perry Middle, 6-8	1	49.4	54.3	10.2	8.5	70.2	56.6	6.1	8.8
South Fant St. Elementary, K-5	2	43.8	58.2	14.6	16.4	46.6	28.7	8.9	10.7
Denmark Olar Elementary, K-5	2	38.1	47.9	12.9	11.2	45.2	45	7.6	7
Denmark-Olar Middle, 7-8	2	39.7	38.3	15.5	14.6	68.1	58.5	6.4	7.5
Whale Branch Elementary, K-5	2	51.5	54.8	9.9	6.2	64.4	54.8	7.3	6.2
Whale Branch Middle, 6-8	2	52	52.6	10.1	9.4	63.2	56.3	8	9.1
Mary Ford Elementary, K-5	2	45.9	49.7	11.6	8.8	48.6	35.7	8.3	7.7
Brentwood Middle, 6-8	2	60.3	68.8	6.2	5.3	69.3	68	3.2	5.4
Edward Burns Elementary, K-5	2	39.2	44.3	16.6	7.7	56.3	47.8	7.1	4.7
RD Schroder Middle, 6-8	2	43	50.8	9.8	8.4	53.8	49.2	7.9	8.8
Scotts Branch Elem/Middle, 4-5	2	43	53.3	12.5	6.3	52.2	50.5	7.7	5.2
Spaulding Elem, 4-6	2	44.9	49.8	13.7	9.1	56.7	41.1	9.5	11.5
JV Martin, 7-9	2	47.7	53.5	15.4	8.4	61.9	55.6	10.1	10.1

Brockington Elementary, K-5	2	30	39.9	24.3	13	34.1	39.1	22.6	8.4
Hollis Elementary, K-5	2	50.7	65.7	9.9	4.9	60.1	54	7.5	5.2
Monaview Elementary, K-5	2	42.5	45.3	15.6	14.4	41.9	30.9	12.4	12.2
Parker Middle, 6-8	2	52.5	72	10	3.1	65.8	68.5	5	5.6
Estill Elementary, K-4	2	49.6	40.6	9.7	14.2	60.3	47.5	7.6	8.7
Lower Lee Elementary, K-3	2	63	48.8	10.9	15	71.7	58.5	13	9.8
Bennettsville Middle, 6-8	2	57.6	65	9.9	5	69.5	63	9.3	6.5
Elloree Elementary, K-6	2	43.2	39.8	11.1	18.1	59	37.9	4.7	13.7
Holly Hill Middle, 6-8	2	41.8	49.7	14.6	8.2	55.3	47.5	10.4	8.8
Brookdale Middle, 5-8	2	46	Closed	8.6	closed	56	Closed	6.6	closed
Robert Howard Middle, 5-8	2	42.4	46	11.8	11.5	57.6	54.9	7.1	4.6
Alcorn Middle, 6-8	2	53.9	59.7	8.2	5	58.2	57.6	6.6	6.9
Crane Creek Elementary, K-5 (Forest Heights)	2	32	35.2	16.7	17.4	42.6	37	18.1	15
Gibbes Middle, 6-8	2	49	49.9	11.3	8.4	68.8	62.7	4.1	6.3
Sarah Nance Elementary, K-5	2	NA	41.9	NA	8.4	NA	51.2	NA	9.5
Myles W. Whitlock Jr. High, 7-9	2	48.3	55.6	9.9	5.4	56.4	51.7	8.2	11.3
Mayewood Middle, 6-8	2	39.8	51.8	15.2	5.3	43	45.6	9.8	10.9
Battery Park Elementary, K-8	2	31.3	41.1	11.3	12.6	34.4	25.3	10.6	14.7
Allendale Elementary, K-5	3		58.4		4.8	63.4	53.2	0.3	4.8
Fairfax Elementary, K-6	3	33.7	42	17.9	14.9	43.7	34.4	16.3	15.6
Scotts Branch Elem/Middle, 6-7	3	43	53.3	12.5	6.3	52.2		7.7	
West Hardeeville Elementary, K-3	3	46.4	55.2	13.1	7	60.6	53.5	8.2	8.3
Cleveland Elementary, K-6	3	49.8	61.9	9.7	9.3	51.2	48.1	11.7	9.4
St. Paul Primary, K-3	Other	28.4	17.1	17.3	40.8	38.3	28.9	9.9	19.7
Johnson Middle, 6-8	Other		60.8		7.9		57.9		7.9
Ridgeland Elementary, K-4	Other	38	34.8	20.3	18.9	47.7	34.3	15.2	20.1
Bishopville Primary, K-3	Other	37.7	35.2	14.9	22.4	44	35.4	11.2	16.5
West Lee Elementary, K-6	Other	38.4	35.3	19.6	15.1	44.9	31.1	16.7	20.2

Rains Centenary /Pleasant Grove, K-6	Other	45.7	57	10.5	9.3	36.8	40.5	12.3	11.8

Table III-4

Tenth Grade Student Performance on BSAP Exit Examination
2002 and 2003
High Schools Assigned Teacher Specialists
Compared within Tier of Services

School	Tier	Reading Subtest		Mathematics Subtest		Writing Subtest		All Subtests	
		2002	2003	2002	2003	2002	2003	2002	2003
Estill High	1	76.2	60.0	60.3	58.7	61.9	48.6	39.7	29.3
Timmonsville Educ. Ctr	2	64.4	63	57.6	72.1	72.4	45	49.2	32.8
Elloree High	2	75	68.6	76.7	88.2	68.3	72.5	55	54.9
Bowman High	2	69.1	70.3	65.5	78.4	58.2	67.6	50	56.8
Allendale-Fairfax High	Other	55.8	62.3	63.4	74.6	61.4	54.2	37.1	39
Denmark-Olar High	Other	60	78.5	58	60	60	64.6	38	44.8
Scotts Branch High	Other	56.3	78.2	57.7	67.9	81.4	84.4	38	59.5
Jasper High	Other	67.4	59.6	61.3	55.5	64	58.2	41.3	36.3
Lee High	Other	64.7	60.9	59.2	62.9	62.5	46.3	41.8	32.9
Terrells Bay	Other	Combined with Brittons Neck to form Creek Bridge							

Some comments can be made from the data presented in the preceding tables:

Grades 3-8 English language arts performance

- Only three elementary or middle schools in any tier reduced the percentage of students scoring below basic by five percent or greater;
- Two elementary schools in the "other" category reduced the percentage of students scoring below basic by five percent or greater;
- Six of 33 Tier Two schools increased the percentage of students scoring proficient or above although only three schools of the 57 did so by five percent or greater;
- Two primary and two elementary schools met the threshold for Adequate Yearly Progress as defined under *No Child Left Behind* federal requirements.

Grades 3-8 Mathematics performance

- 31 of 57 schools reduced the percentage of students scoring below basic by five percent or greater; tier assignment did not reflect differences in impact;
- 22 of 57 schools increased the percentage of students scoring proficient or above although only four schools did so by five percent or greater;
- Two primary and three elementary schools met the threshold for Adequate Yearly Progress as defined under *No Child Left Behind* federal requirements.

Exit Examination performance

- With respect to passing all subtests, three schools improved the percentage of students by at least 5 percent, while four schools lost ground by that amount;
- Performance on the reading subtests demonstrates three schools improving by five percent, and three regressing;
- Performance on the math subtest was most positive; five of nine high schools improved and only one lost ground;
- Performance on the writing subtest was most disappointing; five schools lost ground while only one improved by 5 percent.

Four schools may offer opportunities for deeper understanding of program functioning and impact on academic performance: Elloree Elementary made five percent gains in each of the four gains categories; St. Paul Primary, Bishopville Primary and Ridgeland Elementary made five percent gains in three categories. Neither of the primary schools was assigned teacher specialists in the 2002-2003 year. Elloree Elementary was assigned one teacher specialist and Ridgeland Elementary was assigned three teacher specialists. How do these schools differ from others with similar achievement histories?

A second way to examine student achievement is to explore changes in the school ratings. Schools elevating either their absolute or improvement ratings between 2001 and 2003 are shadowed in green; those with ratings lower in 2003 than in 2001 are shadowed in red. The absolute rating is based upon students in membership at the school as of the 45th day of instruction and at the time of testing; the improvement rating is based upon longitudinal matched student data for grades 3-8 and cohort data for grades 10-12. Students included in the improvement rating for grades 3-8 must have been in membership at the school as of the 45th day of instruction and at the time of testing and have a PACT score for the previous year. Summary ratings include the following changes:

Table III-5
Ratings of Schools Receiving Teacher Specialists on Site
2001, 2002 and 2003

SCHOOL	ABSOLUTE RATING			IMPROVEMENT RATING		
	2001	2002	2003	2001	2002	2003
TIER ONE						
Allendale Fairfax Middle, 7-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Excellent	Average	Below Average
MR Rivers Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Below Average	Unsatisfactory
Clyde Sanders Elementary, K-5	Unsatisfactory	Below Average	Unsatisfactory	Average	Below Average	Unsatisfactory
Estill High, 8-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Average
Estill Middle, 5-7	Unsatisfactory	Unsatisfactory	Unsatisfactory	Good	Below Average	Unsatisfactory
Ridgeland Middle, 5-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory	Unsatisfactory
Dennis/Bishopville Intermediate	Unsatisfactory	Below Average	Combined with grade 6 school	Unsatisfactory	Unsatisfactory	Combine with grade 6 school
Fleming Intermediate, 4-6	Unsatisfactory	Below Average	Closed	Below Average	Average	Closed
Mt. Pleasant Middle, 7-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Good	Unsatisfactory
WA Perry Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory
TIER TWO						
South Fant St. Elementary, K-5	Below Average	Below Average	Average	Below Average	Below Average	Average
Denmark Olar Elementary, K-5	Below Average	Below Average	Below Average	Unsatisfactory	Unsatisfactory	Unsatisfactory
Denmark-Olar Middle, 7-8	Unsatisfactory	Below Average	Below Average	Average	Good	Below Average
Whale Branch Elementary, K-5	Unsatisfactory	Below Average	Below Average	Unsatisfactory	Below Average	Unsatisfactory
Whale Branch Middle, 6-8	Unsatisfactory	Unsatisfactory	Below Average	Below Average	Average	Below Average
Mary Ford Elementary, K-5	Unsatisfactory	Below Average	Below Average	Good	Good	Unsatisfactory
Edmund Burns Elementary, K-5	Below Average	Below Average	Below Average	Good	Below Average	Below Average
Brentwood Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory
RD Schroder Middle, 6-8	Below Average	Below Average	Below Average	Average	Average	Average
Scotts Branch Elem/Middle, 4-5	Below Average	Below Average	Below Average	Unsatisfactory	Unsatisfactory	Unsatisfactory
Spaulding Elem4-6	Unsatisfactory	Below Average	Below Average	Unsatisfactory	Average	Average
JV Martin, 7-9	Unsatisfactory	Below Average	Below Average	Below Average	Unsatisfactory	Unsatisfactory
Brockington Elementary, K-5	Below Average	Average	Below Average	Unsatisfactory	Average	Unsatisfactory
Timmonsville Educ. Center, 9-12	Below Average	Unsatisfactory	Below Average	Excellent	Unsatisfactory	Below Average
Hollis Elementary, K-5	Below Average	Below Average	Unsatisfactory	Good	Below Average	Unsatisfactory
Monaview Elementary, K-5	Below Average	Below Average	Below Average	Below Average	Below Average	Below Average
Parker Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Average	Below Average	Below Average

Estill Elementary, K-4	Below Average	Unsatisfactory	Below Average	Good	Unsatisfactory	Average
Lower Lee Elementary, K-3	Below Average	Unsatisfactory	Unsatisfactory	Average	Unsatisfactory	Unsatisfactory
Bennettsville Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Average	Below Average	Unsatisfactory
Elloree Elementary, K-6	Below Average	Below Average	Average	Average	Unsatisfactory	Average
Elloree High, 7-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Good	Average	Good
Holly Hill Middle, 6-8	Below Average	Below Average	Below Average	Good	Below Average	Below Average
Brookdale Middle, 5-8	Unsatisfactory	Below Average	Closed	Unsatisfactory	Good	Closed
Robert Howard Middle, 5-8	Unsatisfactory	Below Average	Below Average	Below Average	Below Average	Below Average
Bowman Middle/High, 6-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory	Excellent
Alcorn Middle, 6-8	Below Average	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory	Below Average
Forest Heights Elementary, K-5	New school in 2002	Average	Average	New school in 2002	Below Average	Unsatisfactory
Gibbes Middle, 6-8	Unsatisfactory	Unsatisfactory	Unsatisfactory	Average	Unsatisfactory	Below Average
Watkins Nance Elementary, K-5	Below Average	Combined to form a new school in 2002	Below Average	Unsatisfactory	Combined to form a new school in 2002	Unsatisfactory
Myles W. Whitlock Jr. High, 7-9	Unsatisfactory	Below Average	Unsatisfactory	Unsatisfactory	Average	Unsatisfactory
Mayewood Middle, 6-8	Below Average	Below Average	Below Average	Average	Average	Unsatisfactory
Battery Park Elementary, K-8	Average	Average	Average	Unsatisfactory	Average	Below Average
TIER THREE						
Allendale Elementary, K-5	Below Average	Unsatisfactory	Unsatisfactory	Average	Unsatisfactory	Unsatisfactory
Fairfax Elementary, K-6	Below Average	Average	Average	Excellent	Average	Below Average
Scotts Branch Elementary	Below Average	Below Average	Below Average	Unsatisfactory	Unsatisfactory	Unsatisfactory
West Hardeeville Elementary, K-3	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory	Average	Average
Cleveland Elementary, K-6	Below Average	Below Average	Below Average	Average	Unsatisfactory	Unsatisfactory
OTHER						
Allendale Fairfax High, 9-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Unsatisfactory	Below Average
Denmark-Olar High, 9-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Excellent	Unsatisfactory
Scotts Branch High, 8-12	Below Average	Unsatisfactory	Average	Below Average	Unsatisfactory	Excellent
St. Paul Primary, K-3	Average	Average	Good	Unsatisfactory	Below Average	Excellent
Johnson Middle, 6-8	Unsatisfactory	Merged into Timmonsville Middle	Unsatisfactory	Below Average	Merged into Timmonsville Middle	Below Average
Jasper County High, 9-12	Unsatisfactory	Unsatisfactory	Unsatisfactory	Below Average	Below Average	Unsatisfactory

Ridgeland Elementary, K-4	Below Average	Below Average	Average	Below Average	Unsatisfactory	Average
Bishopville Primary, K-3	Average	Below Average	Average	Average	Unsatisfactory	Good
Lee Central High, 11-12	Not rated	Not rated	Unsatisfactory	Not rated	Not rated	Not rated
West Lee Elementary, K-6	Below Average	Average	Average	Average	Good	Average
Rains Centenary /Pleasant Grove, K-6	Below Average	Below Average	Below Average	Average	Average	Unsatisfactory
Terrells Bay High, 7-12	Below Average	Unsatisfactory	Combined with another school	Below Average	Average	Combined with another school

Several observations emerge from examining the data:

- Approximately one-fourth (13 of 57) of the schools receiving services earned improvement ratings of average or above;
- 15 of 57 schools elevated their absolute ratings; eight moved from Unsatisfactory to Below Average; six moved from Below Average to Average; one moved from Average to Good;
- Elementary schools were most likely to elevate absolute and improvement ratings;
- Three middle schools elevated absolute ratings between 2001 and 2003;
- Ten of the 57 schools elevated their improvement ratings between 2001 and 2003;
- Tier assignment did not impact consistently upon movement within ratings categories.

Because there is little movement within ratings categories, a review of the 2003 absolute indices was conducted to determine if schools moved upward within the tier categories. As the reader may recall, Tier One schools began with absolute indices of 2.0 or below; Tier Two schools began with absolute indices of 2.0 or 2.1 and Tier Three schools began with absolute indices of 2.2 through 2.5 as reflected in the 2001 ratings. The 2003 average indices for these schools within tiers are shown below and suggest slight mean gains for Tiers One and Two and no gain in Tier Three.

Table III-6
2003 Absolute Indices of Schools by Tier of Service

Tier of Service	Number of Schools	Median	Minimum	Maximum	Mean	Standard Deviation
One	9	2.02	1.90	2.21	2.03	0.11
Two	32	2.27	1.87	2.83	2.27	0.20
Three	5	2.18	2.14	2.58	2.25	0.18
Other	11	2.40	1.20	2.96	2.18	0.67

Are there changes in the school community and/or culture during the years with teacher specialists?

Three sources of information are used to determine changes in the school community or culture: administrator and teacher turnover rates, summary data from the teacher, student and parent evaluations of the school, and information from the surveys administered by the USC Education Policy Center. Administrator and faculty stability correlate positively with school ratings and higher levels of student performance. The "Teachers Returning" factor is an average over three years while the administrator factor report years in the current assignment.

Table III-7 showcases the summary data by tier.

The data indicate minor increases in teacher and administrator stability over the three years, although the turnover rate remains a challenge for development of local capacity over time.

Table III-7
Summary of Administrative Years at the School and Teachers Returning By Tier

Factor	2001 Mean	2002 Mean	2003 Mean
Administrator Years at the school			
Tier 1: Adm. Years	3	2	2.8
Tier 2: Adm. Years	2	2.5	2.7
Tier 3: Adm. Years	2	2.0**	3.0
Other: Adm. .Years	0	2.4	2.2
Teachers Returning			
Tier 1: Teachers Returning	69.7 %	61 %	64.7%
Tier 2: Teachers Returning	65.5 %	75.8 %	76.7 %
Tier 3: Teachers Returning	77.1 %	75.,7 %	78.2 %
Other: Teachers Returning	63.1%	75.9 %**	75.1

NOTES: *Rounded to nearest tenth

**There may be variations from data presented earlier in the First Year Formative Report because of school closings and mergers between 2002 and 2003.

Each year in accordance with the requirements for the annual school report card all teachers and students at selected grade levels are surveyed to determine their evaluations of the schools. Parents were surveyed beginning in 2003. The surveys include approximately 40 items across three dimensions. Only summary data are published on the school report card, but the item responses are available to the school and district.

Table III-8
Teacher and Student Evaluations of the School: Mean Percentage Satisfied

FACTOR	Teacher Satisfaction			Student Satisfaction			Parent Satisfaction		
	2001	2002	2003	2001	2002	2003	Not administered		2003
Learning Environment									
Tier 1	52%	48.1%	50.8 %	62.7 %	65.2%	60 %			59.1 %
Tier 2	64.1 %	65.7%	70.3 %	67.8 %	72.1%	73.2 &			74.8 %
Tier 3	33.1 %	66.6%	63.5 %	65.1 %	73.2%	69.8 %			71.2 %
Other	57.1 %	71.1%	65.5 %	50.4 %	65.1%	70.7 %			72.2 %
Social and Physical Environment									
Tier 1	59.7 %	56.8%	57.6 %	65.1 %	66.8%	59.6 %			55.7 %
Tier 2	69.1 %	72.5%	74,7 %	69.5 %	71.6%	74.5 %			66.7 %
Tier 3	40.3 %	70%	58.8 %	67.7%	73.4%	69.2 %			72.1 %
Other	65.6 %	72.2%	77.4 %	54.8 %	68.4%	70.5 %			63.6 %
Home School Relations									
Tier 1	36.3 %	26.5%	23.9 %	78.3 %	83%	79.2 %			51 %
Tier 2	36.1 %	33.9%	34.6 %	81 %	84.2%	83.2 %			68.4 %
Tier 3	19.3 %	39.4%	40.6 %	84.3 %	85.4%	76.6 %			72.4 %
Other	36.6 %	41.2%	39.5 %	65.2 %	78%	82.9 %			66 %

*NOTE: Rounded to nearest tenth

Teacher specialists are but one factor that has the potential to influence the school culture. Other factors including the district administration, the principal, the faculty, parents and

community also contribute.

How has the teacher specialist program impacted upon the instructional skills and professional growth of the teachers involved?
This question is addressed by the survey data presented in Part II of this report.

How has the program functioned over time?
Teacher specialists initially were limited to three years in the role; however, by proviso in the Fiscal Year 2002-2003 General Appropriations Act, teacher specialists were granted permission to stay in the role for a fourth year. The fourth year did not carry the guarantee of employment in the home district when the specialist returned to regular teacher status.

As stated earlier, the program model has been changed over time from the one-to-one coaching model outlined in the statute to incorporate several configurations of technical assistance personnel. There are other changes since the conception of the program which include the reorganization of the math-science hubs, a number of programs and grants (e.g., the SC Reading Initiative, *Reading First*), and technical assistance and supplementary services authorized through *No Child Left Behind*. Beyond a common purpose of improving student achievement, the relationship among these services and programs is not clear.

In the initial years of the program, the tiers that determine service were defined in accordance with the absolute indices presented earlier in this report. The SDE now redefines tier assignment based upon an annual review of the indices.

What are the unintended consequences of the teacher specialist program?
At least five unintended consequences can be identified: (1) the inclusion of teacher specialist salary supplements in the calculation of the southeastern average teacher salary skews the average teacher salary toward a small group of teachers, rather than the entire teacher population; (2) although there are not strong data to support the claim, school administrators continue to express concerns that the best teachers are pulled away from schools, resulting in weaker performance in the schools contributing teacher specialists; (3) the assignment of individuals to teacher specialist roles within their home district contradicts the premises supporting the salary supplement (i.e., teacher specialists are compensated for the inconvenience of traveling to another district or school and that the local community does not have the capacity to address problems in its schools; (4) the inability to place teacher specialists in some schools deepens the isolation of those schools from the improvement efforts; and (5) the high teacher turnover rate in the target schools results in the teacher specialist functions serving as a professional development program for schools and districts not targeted for technical assistance.

PART IV

Formative Issues

This Second Year Formative Review has been constructed to provide descriptive and baseline information, not to draw conclusions about the effectiveness of the program. The data do provide insights and opportunities to understand how the technical assistance strategy functions and ways in which its strengths can be maximized and barriers to success can be reduced.

First Year Formative Review Issues and Response

The data suggested a high degree of variability in results. This raised questions about how the "best practices" are defined and the consistency with which they are implemented. In unstable environments, evidenced by change in principals and teacher turnover, the needs for strong program definition and fidelity of implementation of the principles and practices are paramount. With that in mind, the questions below serve as guides in discussions and actions in this second year.

1. Would a thorough and systematic definition of the treatment model(s), overall goal and annual objectives generate more uniform progress and minimize the impact of local turnover and variations of technical assistance personnel assignments?

   The SDE adheres to the leadership team model as described in this report. [NOTE: Effective with the 2003-2004 academic year, the SDE has modified its processes for tier designations and structured technical assistance within seven priorities among the three tiers.]

2. Do all external review team reports recommend teacher specialists or are there settings in which a different technical assistance strategy is recommended and/or appropriate? Does the external review team fully understand the available options and when each is appropriate?

   The external review team process has been clarified so that reports and recommendations now provide opportunities for team members to comment on the school in a narrative form and to indicate the priority for assignment of teacher specialists.

   Through a proviso in the General Appropriations Act, the SDE is to assign teacher specialists at the rate of an average of five per school and may assign teacher specialists to teachers working with students with disabilities or with students of limited English proficiency.

3. Can the building blocks for sustainable change be identified and annual as well as long-range expectations made clear to school communities and technical assistance teams so that immediate and interim progress can be recognized?

   Although the SDE and EOC staff members have worked on this issue, a consensus model has not been achieved. There is agreement on a number of principles including multi-

year improvement efforts, the need for local board and administrator training, flexibility in the use of certain funds and the need for a district guiding administrator to coordinate efforts across schools and within the provisions of *No Child Left Behind*. Eight recommendations to strengthen the technical assistance program were agreed to by the SDE and EOC staff members and adopted by the EOC at its December 2003 meeting. These recommendations are forwarded to the leadership of the General Assembly.

4. How should the high school model differ from the elementary and middle school model?

   The high school model differs in that teacher specialists are assigned by content area, instead of grade level. At the middle school, teacher specialists also are assigned by content area. A review of external review team materials indicates that the teams were not given the option of assigning teacher specialists in social studies.

5. Can the lines of authority and cooperation among the SDE, local district and school administrations and teacher specialists be clarified to support program implementation and sustain improvement?

   The SCEPC survey data indicate that this has been improved, particularly with respect to program administration; however, the relationship of the program with other state and local initiatives offers substantial opportunity for confusion. The data suggest that local orientation to and understanding of the program is critical to support.

6. How can local district and school administrative support and ownership of the teacher specialist role be enhanced?

   The SDE has enhanced the training model to address these concerns.

7. What is the level of annual improvement expected or the level of improvement expected across three years?

   This has not been specified although the SDE has completed background work to establish expectations and the designation of an expected improvement rating is among the recommendations on the technical assistance program adopted by the EOC in December 2003.

8. How can the positive relationships among teachers and teacher specialists be sustained and focused more intently upon student achievement?

   The SDE has increased opportunities for principals and teachers to receive an orientation to the program.

9. What are local factors associated with higher levels of student performance among schools in the teacher specialist program?

   The SDE relies upon the recommendations of the external review team to assign priorities for the assignment of teacher specialists. Other data in the two formative reviews suggest that administrator and teacher readiness and understanding of the

teacher specialist program are critical. In those settings in which the school personnel have been trained there is a higher level of program acceptance. Stability in school assignment for both administrators and teachers is necessary for professional development to move beyond the novice level.

10. What are the financial and instructional costs to schools and districts sending teachers to serve as teacher specialists in underperforming schools?

    Although this remains an issue, mid-year budget reductions resulting in (in many districts) larger pupil-teacher ratios have ameliorated this issue---for the short term.

Second Year Formative Issues

1. How can the program models be clarified so that expectations, roles, responsibilities and authority are clear? The current variations of the teacher specialist program confound internal coherence and consistency; preclude attribution of results and ultimately challenge efforts to replicate the services.

2. Can the protocols used by the external review team be defined so that priority assignments are transparent to those administering, participating in and evaluating the program?

3. What is the most successful model to effect change in high school performance and /or should priorities be placed on ninth and tenth grade instruction? How is the dilemma of low graduation rates affected by the teacher specialist model?

4. Can program administration and authority be defined within the variations using teacher specialists and across school, district and state improvement strategies?

5. Can the teacher specialist program assist in developing local capacity beyond the period of state support?

6. Can the teacher specialist coaching role be separated from the allocation of supplementary instructional materials or services, student extended learning time and other expectations?

7. What is the responsibility of the teacher specialist for student and school achievement? How is this represented in the evaluation of individuals serving as teacher specialists?